



THE EXPERIENCES OF STUDENT NURSES IN CONDUCTING GROUP RESEARCH AT LIMPOPO COLLEGE OF NURSING, SOUTH AFRICA

by

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A dissertation submitted in fulfillment of the requirements for the degree:

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OCTOBER 2021

DECLARATION

I, **Avhatakali Shemary Mavhungo**, hereby declare that the thesis titled “**The Experiences of Student Nurses in Conducting Group Research at Limpopo College of Nursing, South Africa**” submitted for the degree of **master’s in nursing science** in the **Department of Advanced Nursing Science, Faculty of Health Sciences, University of Venda** is my original work and has not been previously submitted for a degree at this or any other institution, and it is my own work in design and execution. All reference materials contained herein have been duly acknowledged.

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Place : University of Venda

Date : 21 October 2021

DEDICATION

Above all, I dedicate this work to God Almighty, my Creator, my source of strength, knowledge and understanding.

I also extend my gratitude to:

- ❖ My mom, Thifhulufhelwi Flora Mavhungu, who raised me with love and care, despite all the challenges of life.
- ❖ My siblings, for believing in me and the support they gave throughout the study.
- ❖ My late father, Nangammbi David Mavhungu, who would have been proud of my achievements.
- ❖ My husband, Rendani Ronald Mudau, I thank you for the support you gave me and the love you have for me.
- ❖ My daughters, Khodani and Aneaho, for your understanding when I spent more time on this dissertation.
- ❖ My son, Rialivhuwa, I stole your time for bonding and breastfeeding in preparing for this dissertation.

ACKNOWLEDGEMENTS

I would like to express my appreciation to the following people:

- ❖ My supervisor, Dr T.R. Luhlima, for her scholarly guidance throughout my studies. I would have not achieved the way I did without her motivation and the knowledge she imparted to me. I thank you
- ❖ I also thank my co-supervisor, Dr J.L. Mafumo, for the guidance and support she gave to me on my learning process. You were a shoulder to lean upon.
- ❖ Our librarian at the University, Ms S. Hlabangwane, what else would I have done without your assistance? You are dedicated to your work and I say keep it up.
- ❖ I appreciate wholeheartedly, Dr E.N. Vhuromu, for the huge step in initiating me to be part of a scholarly team. Who else can leave all the work to accompany co-workers to register at the university, except you alone in my life?
- ❖ Special thanks goes to my family members who encouraged me, even when days seemed dark, my husband, Rendani Ronald Mudau, my daughters, Khodani and Aneaho, and my son, Rialivhuwa.
- ❖ My elder sister, Azwihangwisi Ralda Mavhungu, for all the support you gave me, more especially the financial sustenance.
- ❖ My younger sisters, Tendani and Muimeleli Mavhungu, for babysitting when the study demanded more time than I expected.
- ❖ My brothers, Gerson, Itani and Ndivhudzannyi Mavhungu, for the support you give towards everything I do.
- ❖ Ms T.A. Magavha, you boosted my morale always when my days were down, you have covered work tasks that were supposed to be done by all of us when the study demanded more energy. I thank you.
- ❖ To all my friends who were beside me and co-workers who gave me an ear when I needed their help, I thank you all.
- ❖ I would also like to thank Prof Donavon Hiss, for editorial assistance and typesetting the document (Annexure M)

ABSTRACT

Background: South African nursing students should be taught to conduct research as an investigation process to enable them to practice how nursing knowledge is generated. Students may be requested to conduct research projects as individuals or as a group, depending on institutional preferences.

Purpose of the study: The purpose of this study was to explore the experiences of student nurses in conducting research at Limpopo College of Nursing.

Methodology: A qualitative approach complemented by explorative, descriptive and contextual research designs were used. A non-probability purposive sampling method was used to sample the nursing colleges and participants. A pre-test was conducted. A semi-structured interview guide was used. The interview lasted about 30-45 minutes per participant. A total of 18 participants were interviewed. All participants signed informed consent before data collection. Tesch's open-coding method was used for data analysis. Ethical considerations were adhered to and ethics clearance was obtained from the University of Venda Human and Clinical Trials Research Ethics Committee (HCTREC).

Results: The findings revealed that student research groups are too large and not everyone participated. Most students lacked background knowledge of research while others had insufficient knowledge on it. However, the research module introduced in level two in the Social Science module demanded more efforts and made it difficult for students to comprehend the research process. There was a general lack of expertise in supervising group research exacerbated by superfluous facilitators from different schools of thoughts and poor supervisory roles. Insufficient time was allocated for the research module and a lack of resources to support group researchers impacted negatively on the desired outcomes.

Recommendations: Students should receive training on group learning such as how to set goals, share ideas, divide tasks, use peer- and self-assessment, adopt strategies for conflict resolution, communicate face-to-face and via current technologies. The training should always be scheduled where all students who registered for the research module should attend the classes and should be regarded as a requirement for the research module.

Keywords: experiences, group research, group development theory, Limpopo College of Nursing, student nurses.

LIST OF ABBREVIATIONS AND ACRONYMS

DoH	Department of Health
GDT	Group Development Theory
HCTREC	Human and Clinical Trials Research Ethics Committee
LCN	Limpopo College of Nursing
PBL	Project-Based Learning
PhD	Doctor of Philosophy
R425	A South African Nursing Council Regulation relating to the approval of and minimum requirements for education and training of a nurse (General, Psychiatry, Community) and Midwife leading to registration (South African Nursing Council, 1985)
SANC	South African Nursing Council
SHDC	Senate Higher Degrees Committee
SSC	Social Science
TNC	Thohoyandou Nursing Campus
UHDC	University of Venda Higher Degrees Committee
UNIVEN	University of Venda
USB	Universal Serial Bus
WHO	World Health Organization

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CHAPTER 1

OVERVIEW OF THE STUDY

1.1 Introduction

In this study of “The Experiences of Student Nurses in Conducting Group Research at Limpopo College of Nursing, South Africa” Chapter 1 entails the introduction of the study, the background, problem statement, rationale, significance, the purpose, research objectives, definition of the concepts of the study as well as an outline of the study chapters. Conducting group research simply indicates that research is being carried out by a group of people. The constitution of the group may emanate from the same school, subject, or even from different subjects within a faculty. Many instructors from disciplines across institutions prefer students to work in groups to enhance student understanding of the learning content (Sundgren & Jaldemark, 2020:4). Limpopo College of Nursing also requires students to conduct group research projects. Therefore, conducting group research cannot overlook the fact that group work and research processes are involved. Research indeed has process steps that need to be applied with understanding when one is conducting research (Liliana, Mircea & Claudiu, 2018: 224; Taylor, Kielhofner, Tsang & Arbesman, 2017:86). Hence, it is important to understand that even though operating in group research may benefit students working collaboratively with others (Benediktsson & Ragnarsdottir, 2019:455), occasionally, students’ peculiar personas could be detrimental to some group members. However, the advantages of working in groups weigh better than the disadvantages. The researcher is interested in exploring the experiences of student nurses in conducting group research at Limpopo College of Nursing, South Africa.

1.2 Background to the Study

The background to this study aims to explore the experiences of student nurses in conducting group research. The content of this background outlines the process of conducting group research at the institution of the study—the reason why nursing students should learn research and the experiences of conducting group research projects.

1.2.1 Conducting Group Research at the Institution of the Study

The Limpopo College of Nursing offers Diplomas in Nursing (General, Psychiatry, Community) and Midwifery guided by the R425. The College curriculum requires students to conduct group research projects before qualification. Research is introduced in Level 2 of the social science module (SSC), while students learn theoretical research in Unit 6, in conjunction with other units of study and are assessed in Test 4 of SSC. In Level 3, students are expected to form groups and complete the research proposal at the end of the year. In Level 4, the very same groups are expected to complete their research studies. The students who fail Levels 3 and 4 join new groups of research and continue with it until they submit the final report. Each group research is facilitated by different lecturers within the discipline and the supervisors are allocated according to topics chosen. Therefore, if students chose a topic that falls under the Midwifery discipline, lecturers responsible for that discipline will facilitate the group.

1.2.2 Why do Nursing Students Learn Research?

The idea of conducting nursing group research has been supported by Opsahl and Townsend (2021:19) and Monson (2017:240) positing that nursing students are required to conduct a group research project at their study of baccalaureate nursing

qualification. Unlike the undergraduate students, postgraduate students submerge themselves in group research from the moment they enroll for their advanced qualifications as a requisite (Monson, 2017:240). Those research group projects are introduced to the students to prepare them to become researchers in nursing and health-related problems. Florence Nightingale also emphasized the need for research to improve clinical, academic, and administrative levels in nursing service (Polit & Beck, 2017: 4).

There are many ways in which research can be conducted. The students may be requested to conduct research projects as individuals or as a group, depending on institutional preferences (Kyvik & Reymert, 2017:951; Bazhenov, 2019:2). Group research projects are typically described as opportunities for integrating theory into practice (Mohajan, 2018:1) and the occasion of gaining knowledge through interaction amongst the researcher and participants (Touboulic, McCarthy & Matthews, 2020:37).

1.2.3 Conducting Group Research Projects

Group research project adopted the Project-Based Learning method (PBL) intending to learn in an integrative way (Eglitis, Buntman & Alexander, 2016:212; Monson, 2017:240). PBL is defined as the study efforts for a certain period to reach a specific goal or results either individually or in a group research through active participation (Yilmaz, Yilmaz & Keser, 2020: 629). Through participating in group research, students learn to construct their ideas, make most of the decisions by themselves and are motivated to learn in a better way (Nurtanto, Fawaid & Sofyan, 2020: 2). In Saudi Arabia, students value group research as a means of increasing understanding of the research process (Allari 2016: 65). Skills such as communication, confidence, organisational leadership and English proficiency are also gained when students are working in group research (Sumbawati & Anistyasari 2018:1). The American students

pointed out that they don't just form part of the group research, but also acquire research competencies (Burt, 2017:1). The competencies gained through conducting group research include presenting research, receiving and responding to feedback, solving problems and troubleshooting problems (Burt, Lundgren & Schroetter, 2017:2).

Results of the study conducted in European Norwegian universities were broadly convincing that researching in a group leads to higher productivity and increases the chance of publishing in international journals (Kyvik & Reymert, 2017:952). Besides, a group research project does not just promote collaboration, but also helps members to have alternative perspectives on matters involving the research problem, increasing motivation and minimizing stress related to the research project (Lin, Huang & 2020: 91). Contrary to that, some students felt they performed best on their own and wanted to conduct research individually (Cardwell, Magnier, Kinnison & Silva-Fletcher, 2017:1)

Through the process of conducting group research, students don't just experience positives as they desire. Some experiences are negatives which may discourage students from continuing with their research group projects; such as difficulties with problem identification, academic writing skills, research methods, lack of resources, student supervision, the complexity of proposal writing, and delays with the external moderations (Sonn, 2016:233; Sumbawati & Anistyasari, 2018:1). Additionally, research group members might struggle to get study direction, managing the learning process and failing to resolve conflicts within the group (Gillies, 2016:40). Students complained that the research group wasted much time through idea construction, execution, and accommodating low-ability students (Scager, Boonstra, Peeters, Vulperhorst & Wiegant, 2016:2; Gillies, 2016: 40). According to a study conducted in Turkey, students hated group research due to the method of structuring the groups,

free-riding and lack of time (Ahmadpour, Asadollahfam & Kuhi, 2020:7; Scager *et al.*, 2016:2). Australian students experienced the effects of diversity as a negative factor that hindered learning in a research group, while some students hated groups because they were incapable to work due to shyness and unwillingness to share ideas with others related to low self-esteem (Alfares, 2017: 254). Meanwhile, other participants were disadvantaged by communication barriers. Anxiety among other members of the group was rated as a higher top potential disadvantage of working in a group (Alfares, 2017: 254).

It is well-known that students do not necessarily cooperate during group work; nonetheless, marks are shared among all members, depending on the performance of the group (Ahmadpour *et al.*, 2020:7; Daba, Ejersa, Aliyi & 2017:861). Therefore, students complained that rewards turned out to be unfair since lazy and irresponsible participants were sheltered by the efforts of hardworking participants (Daba *et al.*, 2017:861). They further revealed that group work hampered learning due to the circumstance that individual views were not always preferable and the work was not always productive due to loss of focus and the presence of conflicts that occurred (Rezaei, 2018:3).

It has been confirmed that research group size has also an impact on individual learning (Monson, 2017:242; Alfares, 2017: 248). A group research project that has fewer than 4 and more than 7 participants can bring negative experiences. Less than 4 participants were found to be insufficient to generate knowledge as needed for a bigger project like research and more than 7 participants might be difficult to handle in a group. Since conducting group research is always challenging, authorities should be made aware of barriers experienced by students for better planning and facilitating research effectively (Dadipoor *et al.*, 2019:1).

According to the researcher, students who are conducting group research projects are seen to be compelled to handle research methods processes and group activities at the same time. The researcher wondered how the students were coping under the situation and become productive and competent at the same time. Hence, the researcher sought to explore the experiences of student nurses in conducting group research at Limpopo College of Nursing, South Africa.

1.3 Problem Statement

Learning in groups is all that higher learning institutions desire with the rationale that says "two or more people can do better work than if they work independently of each other" (Kyvik & Reymert, 2017: 951). Limpopo Nursing College students also conduct their research projects in groups as preferred by the college (Kyvik & Reymert, 2017:951). During the research facilitation process, the researcher observed some challenges through students' research groups. Students report one another for group meeting absenteeism's, late-coming for project work, disagreeing on opinion, incomplete work and submitting the research project late for supervision.

Although the conflict between students is a natural part of life inside a classroom or school, students are expected to resolve problems on their own and gain an opportunity for growth out of such conflicts (Pertegal-Felices, Fuster-Guilló, Rico-Soliveres, Azorín-López & Jimeno-Morenilla, 2019: 65083). It surprises that, even though students are given direction for their research documents; they still resubmit the final research on due dates with a myriad of problems, including unaffected corrections from the supervisors accompanied by typing errors in the document. The concern is based on how students experienced research in groups since it has consequences on their performance (Sumbawati & Anistyasari, 2018:1). Furthermore, health care students have a limited understanding of research or group research

(Vairamani & Akoijam, 2018: 806) due to inadequate budget allocation. Therefore, keeping a close eye on supervision is critical. Future research careers also depend on positive research experience, supervision or mentoring and academic support (Cardwell, Mangier, Kinnison & Fletcher, 2017: 1). Hence, the experiences in conducting group research need to be assessed to increase students' interest in conducting research in nursing. The performance of students should be equal to or higher than the standards set for academic achievement (Sadler, 2017:81). The Limpopo College of Nursing sets its standard by admitting only Bachelor's Degree to pass students for the R425 Programme and does not expect less performance during the course. See student research performance in the Table 1.1.

Table 1.1: Thohoyandou campus research results statistics from 2016 to 2018

Year	Total number of research groups facilitated	Scored Percentage 50-55	Scored Percentage 55-60	Scored Percentage 60-65	Scored Percentage 65-73
2016	6	2	1	3	-
2017	7	3	2	1	1
2018	7	1	2	2	2

Research performance statistics show that there is no group of students awarded with distinctions and only three groups scored between 65 and 73 percent. The performance is not an indicator of whether students can comprehend the group research module like they do in other modules. The researcher realized that if challenges remain unchecked, it can prevent effective learning. Therefore, the Limpopo College of Nursing research standard and reputation will be affected negatively. Consequently, research status in the health care setting will drop. Thus, the researcher aimed to explore the experiences of student nurses in conducting group research at the Limpopo College of Nursing, South Africa.

1.4 Rationale of the Study

It is widely acknowledged that student educational performance is dropping at a time in which high productivity is expected (Fajar, Hussain, Sarwar, Afzal & Gilani, 2019:8). The root cause of the problem needs to be investigated for the development of the country. In nursing, students are not only expected to learn research collaboratively in groups, but also to construct knowledge and skills which will help to address global health problems (Squires, Abboud, Ojemeni & Ridge, 2017:191). Therefore, the concern of how students experience research in groups is vital as it determines the quality at which a country develops (Dadipoor, Ramezankhani, Aghamolael & Safari-Moradabadi, 2019:1).

This study aimed to explore the experiences of student nurses in conducting group research at the Limpopo College of Nursing. The researcher is aware of studies that investigated the experiences of students in conducting research and group research such as the ones conducted by Monson (2019:131) and Pentillion, Melrose, Moore & Nuttgens (2017:146). However, these studies outlined that research groups work better with a small number than with a large number of participants. Also, these studies have not concluded how group work can be made more productive, in such a way that those who have difficulties to learn in a group can be accommodated.

Moreover, what Limpopo College of Nursing students are experiencing may not be the same as what other students have experienced. The difference between this study and the others previously conducted is the study setting and target group. This study was conducted in South Africa which is a developing country whereas others have been conducted in developed countries. The experiences of students conducting research in developed countries and of those in developing countries will never be the same. The target group for this study is R425 undergraduate nursing students and

other studies were focused on sociology and science students. This study may open a way for other researchers to inquire more about the topic, depending on the gaps that they identified herein.

1.5 Significance of the Study

Nursing Education

This study may assist nursing students to discover good learning experiences which may encourage them to engage in research and to identify the root sources of challenges as well as ways of overcoming them. The students may gain new skills on how group research is conducted which may improve the level of their academic performance. The college management might be provided with knowledge on what the students are experiencing when conducting research. Based on the study findings, the college management may strengthen the support they give to students on research. Improved support to the students may help in increasing academic performance and uplifting the standard of the college. More knowledge may be generated from students' research which may add to the body of nursing knowledge. Furthermore, nurses may be more advanced in assessment and problem identification skills. The college management, as policymakers, may identify the challenges that are encountered by the students in the research module and they may be better posed to plan future policies which may enhance the smooth running of the module.

1.6 Purpose of the Study

The purpose of this study was to explore the experiences of student nurses in conducting group research at Limpopo College of Nursing, South Africa.

1.7 Objectives of the Study

The objectives of the study were to:

- ❄ Explore the experiences of student nurses in conducting group research; and
- ❄ Describe the experiences of student nurses in conducting group research.

1.8 Definition of Concepts

1.8.1 Experience

Experience is the manifestation of interactions of organism and environment (Acampado, 2019:2). In this study, experience means feelings of being exposed to a group research project for a specific period.

1.8.2 Group

A group is a formation of at least two people who come together for a given purpose, and communicate with each other (Gençer, 2019:224). In this study, a group refers to students who assembled themselves to conduct a research project.

1.8.3 Group Research

It is research conducted by a group of researchers from the same faculty working together on a particular issue or topic (Williams & Nottingham, 2014:2). In this study, group research means a group of student nurses who carry out a task by integrating the research process to investigate a matter of concern.

1.8.4 Nursing College

Nursing College refers to a post-secondary educational institution, which offers

professional nursing education at a basic and post-basic level where such nursing education has been approved in terms of section 15(2) of the Government Notice No. R425 (South African Nursing Council, 1985; Downing, Poggenpoel, Kobe & 2020:2). In this study, a nursing college refers to the Limpopo College of Nursing institution located in Limpopo Province which provides basic nursing education and training in nursing (General, Psychiatric and Community) and Midwifery.

1.8.5 Research

Research is a systematic inquiry that uses disciplined methods to answer a question or solve problems (Polit & Beck, 2017:140). In this study, research means a study of unexplained phenomena and the investigation process of acquiring knowledge development by nursing students

1.8.6 Regulation 425

Regulation 425 is a South African Nursing Council regulation relating to the approval of and minimum requirements for education and training of a nurse (General, Psychiatry, Community) and midwife leading to registration (South African Nursing Council, 1985). In this study, R425 refers to the training course registered with the South African Nursing Council leading to professional nursing qualifications.

1.8.7 Student Nurse

A student nurse/learner nurse is a person undergoing education and training in nursing, who registered in terms of section 32 (1) of the South Africa Nursing Act (Nursing Act No. 33 of 2005). In this study, a student nurse means a learner who is training at Limpopo College of Nursing and registered as a learner nurse with the South African Nursing Council (SANC).

1.9 Outline of the Thesis Chapters

The dissertation is composed of five chapters as outlined in Table 1.2.

Table 1.2: Outline of the dissertation chapters

Chapter 1	Overview of the Study Chapter 1 in this study of “The Experiences of Student Nurses in Conducting Group Research at Limpopo College of Nursing, South Africa” outlined the introduction of the study, the background, problem statement, rationale, significance, the purpose, research objectives and the definition of the concepts of the study.
Chapter 2	Literature Review Chapter 2 encompasses the literature review, detailing the experiences of student nurses in conducting group research, and providing the theoretical framework, the formation of groups while integrating the theory development that underpins the study and the facilitation of groups when conducting group research.
Chapter 3	Research Methodology Chapter 3 outlines the methodology chosen, the study design, setting, population and sampling, data collection method, management and analysis, measures to ensure trustworthiness and ethical considerations.
Chapter 4	Analysis, Presentation and Interpretation of the Results This chapter covers the analysis of data collected and the presentation and interpretation thereof.
Chapter 5	Discussion of the Results and Literature Control This chapter discusses the study findings. The themes and sub-themes derived from data analysis are supported by other research studies. The student’s experiences of conducting group research at Limpopo College of Nursing were related to the challenges that underline the problem statement described for the study.
Chapter 6	Summary, Limitations, Disseminations, Recommendations, Conclusions and Implications In this chapter, the summary, limitations, recommendations and conclusions of the study are presented. The limitations and implications of the study are discussed and recommendations are made based on the study findings.

1.10 Summary

Chapter 1 of this study addressed the study background, problem statement, rationale of the study, the significance of the study, the purpose and objectives, the definition

of the concept and outlines of study chapters. The next chapter, which is the literature review, discusses in detail the sources on the experiences of student nurses in conducting group research, the development of groups and the facilitation of groups.

CHAPTER 2

LITERATURE REVIEW

2.1 Introduction

The previous chapter gave a detailed overview of the study. Chapter 2 reviews literature pertaining to the experiences of student nurses in conducting group research, the wide-ranging information on how research groups are developed and the facilitation of group research. A literature review is broadly described as a more or less systematic way of collecting and synthesizing previous research (Snyder, 2019:332). It is conducted for its indispensable purpose in the study such as providing a piece of evidence in testing the hypothesis, and it is an essential feature of academic research (Xiao & Watson, 2019:93). Furthermore, it provides an overview of study gaps on conducted research as well as supporting or serving as a foundation for new study findings (Snyder, 2019:332).

2.2 Experiences in Group Research

It is believed that the quality of life and the survival of every country lies in education and research (Nakhaee & Arab Nasrabadi, 2019:50). In response to such notions, the United States of America devised a means to meet national research goals and for science to benefit from such labour forces (Hernandez, Woodcock, Estrada & Schultz, 2018:204). Sub-Saharan Africa invests in students enrolled in universities with an interest in research as a crucial first step in achieving sustainable research capacity for the region (Izugbara, Kabiru, Amendah, Dimbuene, Donfouet, Atake, Ingabire, Maluka, Mumah, Mwau & Ndinya, 2017:4).

In response, the rise in enrollment for postgraduate nursing studies such as master's and Doctor of Philosophy degrees (PhDs) has been documented in the higher institutions in South Africa (Mbombi & Mothiba, 2020:42; Mhlahlo, 2020:164). The worry does not only focus on the number of students enrolled to such stated qualifications, but also to produce competency in research.

For centuries, higher education institutions have been reliable sources for teaching and training research skills (Brew, Boud, Lucas & Crawford, 2017:1), with students promoted to collaborate in learning projects like research, and students participate in their activities in small groups where they share their knowledge and expertise (Scager *et al*, 2016:1; Monson, 2019:1; Cranwell & Page, 2020:1). Group research is one of the students collaborating activities performed in higher learning institutions (Scager *et al*, 2016:1). Conducting group research involves aspects such as the collaboration of a group as a whole, a commitment of student researchers, supervisors, learning institutions and the study participants (Cao, Kivilova & Grunis, 2017:2862,) for successful completion of the study.

The benefits of working in a group are well-documented by various scholars (Rezaei, 2017:5; McKinney & Cook, 2018:2). However, it is not clear why working in a group does not work all the time (Rezaei, 2018:2). Students have been heard complaining that not all tasks are worth group work (Theobald, Eddy, Grunspan, Wiggins & Crowe, 2017:6). On the contrary, some students agreed they do enjoy group discussions in class to learn about other's viewpoints (Rezaei, 2018:2). However, it does not necessarily mean they do enjoy working together as a group on specific projects. The researcher was interested to understand how students experience, cope and learn within group research projects. It has been noted that as group research is conducted, a shortage of working material and resources for team skills has been problematic for a very long time (Sibanda, Marongwe & Mbodila, 2019:119).

However, learning institutions do have an influential effect on group research and research performance (Abramo, D'Angelo & Murgia, 2017:6). It has further been mentioned that lack of infrastructure in the learning institutions and limited availability of hardware and software are common barriers that affect the progress of several groups and individual studies (Abramo, D'Angelo & Murgia, 2017:6). Likewise, learning institutions were found to provide limited support to group research, little facilitation, and failing to understand the composition and how it works (Mbombi & Mothiba, 2020:42).

Due to the nature of the collaboration environment, conflicts exist and issues such as cultural differences, high level of interaction, mutual authority and sharing of resources have the potential of causing problems (Hildebrandt & Marr, 2020:219). Sometimes, research group members encounter a situation where other research members are afraid to interact with others for various reasons, such as historical isolation or low status within the social hierarchy and situations in which culturally dominant existence in a group is clear (Abramo, D'Angelo & Murgia, 2017:3). It has also been reinforced by research done in Italy that certain group members may not possess all of the essential competencies for group accomplishment (Abramo, D'Angelo & Murgia, 2017:3).

Time is also perceived as the most critical element for achievement (Theobald *et al.*, 2017:2). Researching as a group allows more efficient use of time because it permits every team member to work in parallel on various parts of a project, reducing the time for its accomplishment (Theobald *et al.*, 2017:2). While still distressing over the issue of limited time, sometimes groups develop into poorly functioning groups when not expected (Theobald *et al.*, 2017:2). Dysfunctional research groups can happen for a variety of reasons, including lack of formal training for group members on how to work effectively together, lack of formal training for instructors and team leaders on how to

effectively structure and manage groups and lack of adequate tasks, e.g., tasks that are either loosely structured or insufficiently complex (Theobald *et al.*, 2017:2).

2.3 Facilitation of Group Research

It is agreed that the success and quality of postgraduate research is largely dependent on the effective and efficient supervision of students (Heynsa, Bresser, Buysc, Coetzeea, Korkied, Whitee & Mc Cormack, 2019:1353; Javaid & Hussain, 2018:710; Muthanna & Alduais, 2020). However, the research supervisory role is not an easy task—it is becoming increasingly complex, depending on the demands students need to meet to attain their expected goals and when supervising a group of students (Hayes & Stefurak). Efficient group supervisors spend more time on roles such as directing the students on the allocated time for meetings, help in the generation of original ideas, close interaction with academics to gain more knowledge, fostering competency and awareness about academic literature (Javaid & Hussain, 2018:710; Hadi & Muhammad, 2017:178).

Furthermore, when working with some students, supervisors' attitude, approachability, friendliness, student support, intellectual ability as a critical thinker, consistent involvement, cultural learning and compassion in research are what good group supervisors strive for (Javaid & Hussain, 2018:710; Hadi & Muhammad, 2017:178). The 'how' part of supervisors dedicating their research skills to their students means a lot in motivating the students to have further interest in research since the potential of future research depends on the experience researchers had with their supervisors (Inouye & McAlpine, 2017:15). This requires that supervisors are able to recognize when their group research stacked, determine the causes of the stack, provide encouragement and support so the students can move forward again (Hadi & Muhammad, 2017:178).

Supervision on its own does not make group researchers achieve in their studies, but it requires a good relationship that is based on values of respect for persons, individuals right to self-determination, mutual respect, and understanding (Hadi & Muhammad, 2017:184). Furthermore, the relationship should not only foster continuous support, but must empower the students to become independent researchers as much as possible (Heyns *et al.*, 2019:2). Despite recognized efforts that supervisors put in for students to complete their research studies, it is well-known that not all supervisors have an interest in their work while others are unable to notice a mere sign of student difficulties in progressing to the next step to intervene (Muthanna & Alduais, 2020:2). Such supervisors fail to interact and poorly communicate with students and are only interested in work done rather than who did it (Heyns *et al.*, 2019:2). Those supervisors do not encourage their students towards creativity or engage them to become members of the scholarly community (group researchers) (Muthanna & Alduais, 2020:2).

Though it is known that students cannot succeed well with their dissertations or theses without assistance from supervisors, many students are dissatisfied with the supervisory practices of their supervisors (Hadi & Muhammad, 2017:178). Also, a large proportion of students fail to complete their studies within the stipulated timeframe or give up their studies completely due to problems related to inadequate supervision, research support and a poor environment (Heyns *et al.*, 2019:2; Garg, Goyal & Singh, 2017:358). Group supervisors believe that groups work better as evidenced by seeing student engagement, transformation and achievement in general. However, what transpires within the group and during task performance is not known unless the students report it to the supervisors (Monson, 2019:242). Although all the aspects involved in group research have a dynamic effect on the experiences of students in conducting group research, it is still the responsibility of

every member to accomplish study goals. Meanwhile, students expect to complete the group research study with knowledge and critical thinking skills enough to make an individual an independent researcher. The completion of the group research task should be within an expected timeframe (Vryzidis & Spyridakos, 2017:29).

2.4 Theoretical Framework

The theoretical framework for this study was grounded on Group Development Theory (GDT) established by Bruce Wayne Tuckman in 1965 (Jones 2019:25). A theoretical framework is the blueprint or guide for research and is based on an existing theory in a field of inquiry that is related to or reflect the hypothesis of the study (Adom, Hussein & Agyem, 2018:438). The theory is outlined in Figure 2.1 which consists of five stages of group development which are: forming, storming, norming and performing and the last stage adjourning was added after the theory was revised by Tuckman & Jensen (1977, cited in Jones 2019:25; Guttenberg, 2017:7). Figure 2.1 shows the theoretical framework process.

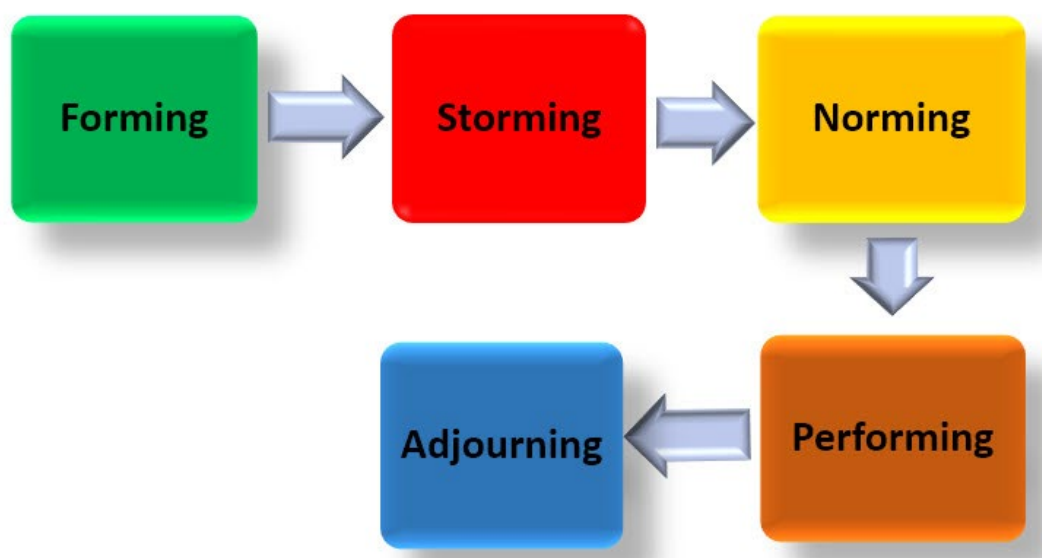


Figure 2.1: Group Development Theory stages adopted from Tuckman and Jensen (1977)

2.4.1 The Origin of Groundwork of Group Development Theory

Tuckman developed the theory to explain how and why groups develop over time (Bonebright, 2010:114). The GDT was mostly preferred and cited by many academic researchers in explaining how groups develop and function (Jones, 2019:25). The theory emphasized that as groups developed, they went through different stages to reach task completion or goal achievement (Vaida & Șerban, 2021:92). The theory also stressed that during a period of group development until task completion, a group characteristic such as group structure, status hierarchy, roles, norms, leadership, cohesiveness and conflict manifest and also play a role in the success or failure of the groups (Guttenberg, 2017:17). The group characteristics are further divided as interpersonal and task dimensions at each stage. Interpersonal attributes are behavioural activity, interaction and relationships formed among group members (Hildebrandt & Marr, 2020:219). The task dimension focuses only on activities shared among group members (Hildebrandt & Marr, 2020:219).

The GDT is used as a map of how groups develop. The researcher found the theory more appropriate, since this study was more about the experiences encountered in group research projects. The theory helped the researcher to investigate the experiences of groups when conducting research which determined the success or failure (Guttenberg, 2017:17). It further gave the researcher insight on how each GDT stage manifests during group development (Purwanto, Zuidervijk & Janssen, 2018:51; Jones, 2019:25; Vaida & Șerban, 2021:92; Hildebrandt & Marr, 2020:219). The question that drove the researcher was, “What are the experiences of conducting a group research project?” The researcher felt that more was experienced by the students when conducting group research as evidenced by uncertainties encountered as students were supervised. The researcher followed the GDT to help to understand how groups are formulated and collaborate in conducting research.

2.4.2 The Development of Group Research

Effective group research develops through the sequence of stages described by Tuckman's theory of group development (Jones 2019:25; Guttenberg, 2017:7). The sequence of stages helps in the development of the groups until termination (Stroud Stasel 2019:79).

2.4.2.1 Forming

Forming is the first phase of GDT where group members become oriented to the task, create ground rules, and they are polite and formal with one another (Guttenberg, 2017:16; Hildebrandt & Marr, 2020:219). The groups may start when the supervisor grouped the students or when students grouped themselves (Bazhenov, 2019:2; Copeland & James, 2016:29). Nevertheless, the groups that are developed have benefits—it depends on how the group perceives it. Other group members perceive that group formation through self-selection is preferable because it has a positive effect on student outcomes (Bazhenov, 2019:2). It has further been suggested that students who choose their group members observe the group learning as more valuable and effective than students who are randomly allocated to groups (Poort, Jansen & Hofman 2020:1). However, the teacher selection is preferable though because it ensures group heterogeneity, which contributes to the quality of learning (Poort, Jansen & Hofman, 2020:1).

In this study, the groups found at Limpopo College of Nursing were made from a supervisor's choice, as mentioned by Bruce Wayne Tuckman in 1965 (Jones 2019:25). The supervisors wanted to have five main groups, so that the five disciplines within the College can have a group to supervise. The reason for the male students needed in each group was that their number is limited at Limpopo College of Nursing and each group research should represent all the genders.

The Limpopo College of Nursing students come together for the first time as a group and they compile a research group list for submission. The number of students per group depend on the total number of students enrolled in the research module (Jones, 2019:25; Monson, 2019:116). The groups differ in terms of gender and number. Each department will facilitate groups of student researchers who chose a topic relevant to its discipline. The groups may have more or fewer members depending on the number of entire students registered for the research module. Therefore, the number of members in the group plays a role in group performance.

For the groups to further develop, factors such as group size should be considered since it influences group effectiveness (Manikandan, Leninraja, Paramasivan, Jothiani & Suresh, 2019:1; Rezaei, 2017:10). The ideal group size recommended to foster effective learning should accommodate about seven members (Ihm, An & Seo, 2017:745; Monson, 2017:242; Alfares, 2017:248). During data collection and analysis, the Limpopo College of Nursing were found to have more than ten students which is regarded to be a large research group size.

There is no evidence which states that when groups are small or large, they will fail to achieve their objectives. According to Mesquita & Lopes (2018:9803), small groups perform effectively compared to larger groups. Therefore, it is indicated that increased group size will stimulate social loafing and free-riding behaviour to occur, while small groups make it easier to notice and address such behaviours (Kloppenburger, Nurlatifah, Spijkerboer & Yasmin, 2018:36). The same sentiment is shared by Milinga, Kibonde, Mallya and Mwakifuna (2019:27), who stated that despite social loafing and free-riding tendencies, large groups are difficult to handle. Social loafing is the tendency to reduce the individual effort when working interdependently in a collective setting as compared to the individual effort used when working alone or independently in the mere presence of others (Zhu, 2018:7). While free riding is the behaviour of an

individual in a group, who shares in the benefits of group work, but does not provide a proportional share of the costs to obtain those benefits (Kloppenburg *et al.*, 2018:36).

2.4.2.2 Storming

Storming is a hard time for the group. Lack of unity, division around interpersonal issues, friction due to differences in background, personalities and agenda and emotional responses to the task are characteristic of this phase (Jones, 2019:26; Hildebrandt & Marr, 2020:219). There is a certain time when members experience conflict (McKinney & Cook, 2018:14). Any action within the group can provoke emotions. Many studies point out that the diversity in the socio-cultural background, status hierarchy and language differences contribute to conflict (Yew & Goh, 2016:75; Wilson *et al.*, 2018:21; Feichetner & Davis, 2016:58). It is further agreed that, conducting research is a complex task that may evoke emotions and behaviours (Monson, 2019:121; Akyurek & Afacan, 2018:47; Allari, 2016:63; Sumbawati & Anistyasari, 2018:1). However, it is up to group members how they control their emotions.

Social loafing and free-riding are behaviours that do not seem to have an impact on others, but are tricky on others and it might be the root source of group dysfunction (Zhu, 2018:7). Another kind of conflict arises when a group loses focus and encounters productivity loss, as a result of some group members who may decide to reduce their workload in trying to get fair or equal share load to those who play social loafing and free-riding (Kloppenburg *et al.*, 2018:36). Moreover, other conflicts are caused by those who put in more effort than allocated to fulfill the task and to accomplish the objectives (Milinga *et al.*, 2019:27). This kind of activity decreases the team working spirit, adds a burden of workload to other group members and results in

exhaustion, demoralizing active members in the group, time consumption, conflicts and poor progress on group research (Milinga *et al.*, 2019:27; Rezaei, 2018:7). The most concern leading to conflict raised by many groups is the fact that some students do not do their share in group work (Rezaei, 2018:7; Zhu, 2018:7; Kloppenburg *et al.*, 2018:36; Milinga *et al.*, 2019:27). However, other influences of interpersonal conflicts arise as consequences of super egos, super controllers, and micro managers in the group (Rezaei, 2018:7; McKinney and Cook, 2018:14). Poor communication among students was also found to cause conflicts among students through limiting group work projects (Rezaei, 2018:7).

An issue around lack of time when carrying out research studies has been reflected by several scholars as to the biggest obstacle when conducting a research study (Havenga & Sengane, 2018:2; McKinney and Cook, 2018:14; Poort Jansen & Hofman, 2019:9; Alfares, 2017:252; Alsied & Ibrahim, 2017:148). Insufficient time is expressed as another aspect influencing conflict among students since it limits students to set up meeting times outside the classroom (Poort, Jansen and Hofman, 2019:9; Alfares, 2017:252). Students also verbalized that group research is so stressful when it comes to managing time (McKinney & Cook, 2018:14). It has been said that more time is wasted even when students ask instructions several times from their group mates, trying to accommodate everyone in the group, including those who learn at slow paces (Poort, Jansen & Hofman, 2019:9; Alfares, 2017:252). Such challenges were experienced more often in the mixed-ability group (Alfares, 2017:252). Students also suggested that instructors should train students in the basics of teamwork and how to work in groups effectively to avoid misunderstanding which leads to conflicts within the group. Such student concerns are believed to be the root sources in facilitating or hindering student group work (Rezaei, 2018:2). The time factor is not a minor problem to underestimate—time spent on group research

contributes to effective group work and deeper learning. Therefore, it is important to remember that to influence the benefits of group work, students must have sufficient time and support to make group work a meaningful process (Poort, Jansen & Hofman, 2020:13). Due to its huge impact on research, students further suggested that supervisors' help is needed with time setting (Rezaei, 2017:2).

The Limpopo College of Nursing admits students from five districts of Limpopo Province, and they speak different languages. However, this study does not support Tuckman on conflicts caused by cultural differences, super egos, super controllers, and micro managers in the group. Social loafing and free-riding which was the most top concern influencing conflict within groups at Limpopo College of Nursing. The second factor that promoted group conflicts was limited time given to the students to complete their group research project, as they suggested. Groups had some difficulties with late comings to the group meetings by group members, which later affected their completing group research as said by Tuckman on GDT. Several authors stated that the GDT indicated that not all groups succeed in the storming phase. It is the groups that become aware of the stumbling blocks and find ways to resolve the problems (Le, Janssen & Wubbels, 2018:104; Guttenberg, 2017:22).

2.4.2.3 Norming

Norming is the third phase of the theory, where group members accept one another, express personal opinions and roles and norms are established (Hildebrandt & Marr, 2020:219). People do not always fight throughout the year, there is a harmony stage where group members start to accept one another, are willing to work as a group and learning to be culturally diverse (Stroud Stasel, 2019:79). People learn to familiarize themselves with the task and the objectives are well outlined for every member to implement, while ground rules/norms are laid down for every member to be abided by

(Zhu, 2018:15). Norms refer to behaviours that are "expected" of others, act as guidelines for acceptable behaviour in the group and arise within the group as shared expectations, whether implicit or explicit (Hayes & Stefurak, 2011:n.p). The appropriate norms and rules are developed to guide the performance of their group research. The rules mostly include aspects of member attendance to group meetings and participation (Milinga *et al.*, 2019:38).

Like what have been stipulated by Tuckman on GDT, the Limpopo College of Nursing groups experienced a norming stage as well. However, not every group member had insight about the learning objective and abided by the group norms. Some members were reported not to comply at all and the harmony within the group was experienced when active students trying to make peace within group and to accept difficult members within the group. The thing that makes difficult students to be accepted in the group, was the issue of feeling pity for them and to gain money from them as punishment. The money is used by the group for study purposes. The group members try by all efforts to discover the most effective ways of working (Purwanto *et al.*, 2018:51), because students are seen working together and submitting the work to the facilitators. However, some groups seemed to need strict supervision for them to submit work for check-up, while other groups fail to submit the work as expected.

2.4.2.4 Performing

In this phase, group functioning is at an optimal level (Vaida & Șerban, 2021:92). The roles become flexible and functional (Bonebright, 2010:114). Everybody accepts one another and the optimal level of research group functionality resulted (Stroud Stasel 2019:79). Members of the group continue to communicate in constructive ways, working with a high degree of collaboration, creativity, and productivity (Hayes & Stefurak, 2011:n.p). The research group productivity and effectiveness are observed

not only by group members, but with the supervisors as well (Zhu, 2018:16). Group research members are abided by the rules and norms they develop for effective functioning within the group (Milinga *et al.*, 2019:39). However, those who fail to comply with agreed rules and norms are being punished. The most frequent punishment used by groups is monetary fines. The fines include paying for all stationery costs involved in completing the assignments such as typing and printing of the final work (Milinga *et al.*, 2019:39). The group members increase energy and time for the allocated activities considering the deadline (Young, 2017:1) and being motivated by having an idea of what is expected of them (Theobald, *et al.*, 2017:12). Every member of the group wants to show abilities related to group work.

The Limpopo College of Nursing groups experienced a performing stage as mentioned by Tuckman on GDT. However, the collaboration within the group was compromised by those who are given tasks and fail to present/complete their tasks in the next meeting. The complying and active students will work on extra tasks to cover the work which was not done by non-complying students. In this study, the performing stage experienced by the active students among themselves working close to each other for the sake of submitting work needed by the supervisors. Non-complying students continue with their behaviours and waiting for active students to do the work. Students are seen proceeding through all the stages of research with some difficulties though. In this stage, it is where students are seen to be acquainted with their research topics and they are no longer minding what non-complying students contribute or do not contribute. However, some groups become stressed and do not progress as expected.

2.4.2.5 Adjourning

Adjourning encompasses objectives achieved and it's time for separation (Vaida &

Şerban, 2021:96; Bonebright, 2010:114). In this stage, students are seemed to be more relaxed and it's a time when a final report is written and presented. The groups have mixed feelings as they have to celebrate the success and mourning for separation at the same time (Jones, 2019:27; Vaida & Şerban, 2021:96). Group members recess at a point where the objective of the group is accomplished (Hayes & Stefurak, 2011:n.p). At this juncture, group members have the opportunity to reflect upon performance and satisfaction with the quality of group relationships (Zhu, 2018:16). Some group members may have a chance to share their feelings and thoughts, celebrate effort and achievement, and comment on their learning. Then again, separation issues may also cause distraction and conflict in some groups (Zhu, 2018:16).

The adjourning stage at Limpopo College of Nursing was experienced by all group members differently in the manner that Tuckman on explained GDT. Some students reported good experience and a learning curve, while others saw it as a break to rest from the most difficult and uninteresting project. Such student reflected little/or no skills learned on group research. The common thing is that all group members are happy, but for different reasons.

2.5 Summary

Chapter 2 discussed the literature review. The focus was on the experiences of conducting group research, the development of group research and how group development theory applied to the study as well as the facilitation of group research. The chapter also described the theoretical framework which is group development theory that underpins this study. The next chapter describes the research methodology and experimental designs used in this study.

CHAPTER 3

RESEARCH METHODOLOGY

3.1 Introduction

The previous chapter presented the literature review, which focused on the experiences of student nurses in conducting group research, how research groups are developed, the facilitation of the group research and the theoretical framework of the study. This chapter discusses the research approach chosen for this study of “The experiences of student nurses in conducting group research at Limpopo College of Nursing, South Africa”. The chapter further discusses the methodology chosen on concepts such as study design, population and sampling methods, pre-test result, the method of data collection, method of analysis, and the ethical issues in relation to this study.

3.2 Research Approach

Research approach is defined as a plan that shows how the study will be conducted, i.e., a plan according to which data will be assembled (Brink, van der Walt & van Rensburg, 2017:118). The methodology adopted in this study was a qualitative approach. A qualitative research approach refers to research about persons’ lives, lived experiences, behaviours, emotions, and feelings as well as about organizational functioning, social movements, cultural phenomena, and interactions between nations (Rahman, 2020:102; Jameel, Shaheen & Majid, 2018:1; Lemon & Hayes, 2020:604). In other words, it is research that produces findings not arrived at by statistical procedures or other means of quantification (Rahman, 2020:102).

In this study, a qualitative approach was utilized to explore the in-depth information concerning the experiences of student nurses in conducting group research at Limpopo College of Nursing, South Africa. The researcher also opted for a qualitative approach because experiences cannot be quantified. The researcher wanted to understand the reason behind students' involvement in research groups.

3.3 Study Design

Research design is the plan for addressing a research question, including specifications for enhancing the study integrity (Polit & Beck, 2017:743). In this study, the researcher adopted exploratory, descriptive and contextual research designs. The researcher opted to use these research designs to delve into and provide an in-depth understanding of the phenomena since very little was known about what students were experiencing when conducting group research.

3.3.1 Exploratory Design

Exploratory research is the study that explores the dimensions of a phenomenon that develops or refines hypotheses about relationships between events (Polit & Beck, 2017:728). In this study, the explorative design was utilized to discover the in-depth complexity of students' experiences in conducting group research at Limpopo College of Nursing, South Africa. Since little was known about what students are experiencing during research, the researcher became interested in discerning students' conflicts in depth. The researcher gave participants enough time to express themselves on how they navigated through group research. The interview was scheduled for about 30-45 minutes, however, some participants needed about one hour of interview due to information they had. The researcher had more than one session with each participant to explore more on the participant's experiences regarding conducting group research.

3.3.2 Descriptive Design

Polit & Beck (2017:728) explained the purpose of descriptive research as to observe, describe, and document aspects of a situation as it naturally occurs and sometimes to serve as a starting point for hypothesis generation or theory development. In this study, the researcher allowed the students to describe their experiences in conducting group research while the researcher was observing and documenting everything helpful for the study hypothesis. The researcher was interested in finding out the students' experiences when conducting group research. The researcher was seriously observant when interviewing the participants. All the verbal and nonverbal cues were observed, documented and recorded as well. The researcher always verified verbal and nonverbal cues from the participants to avoid misinterpretations and for later proper description.

3.3.3 Contextual Design

A contextual design is to devise a step-by-step process for collecting field data and using it to design any sort of technical product (Machado & Pacheco, 2019:59). In this study, the contextual design was adopted by the researcher to investigate the study problem in a setting where the problem was occurring. The researcher met participants after making appointments with them. All participants were interviewed at their respective campuses. It was the surrounding that participants were familiar with and the environment never caused an obstacle on interview sessions. The researcher ensured that all the information gathered was aligned with the experiences of student nurses in conducting group research. Data was collected from the prescribed setting which was Limpopo College of Nursing—Thohoyandou, Sovenga and Giyani Campuses. The researcher's questions did not entertain information that was not pertinent to the topic, the setting and the target group.

3.4 Study Setting

A research setting refers to the specific place or places where data are collected (Brink *et al.*, 2017;60). Limpopo College of Nursing has five campuses which are: Thohoyandou, Giyani, Sovenga, Waterberg and Sekhukhune (Figure 3.1).

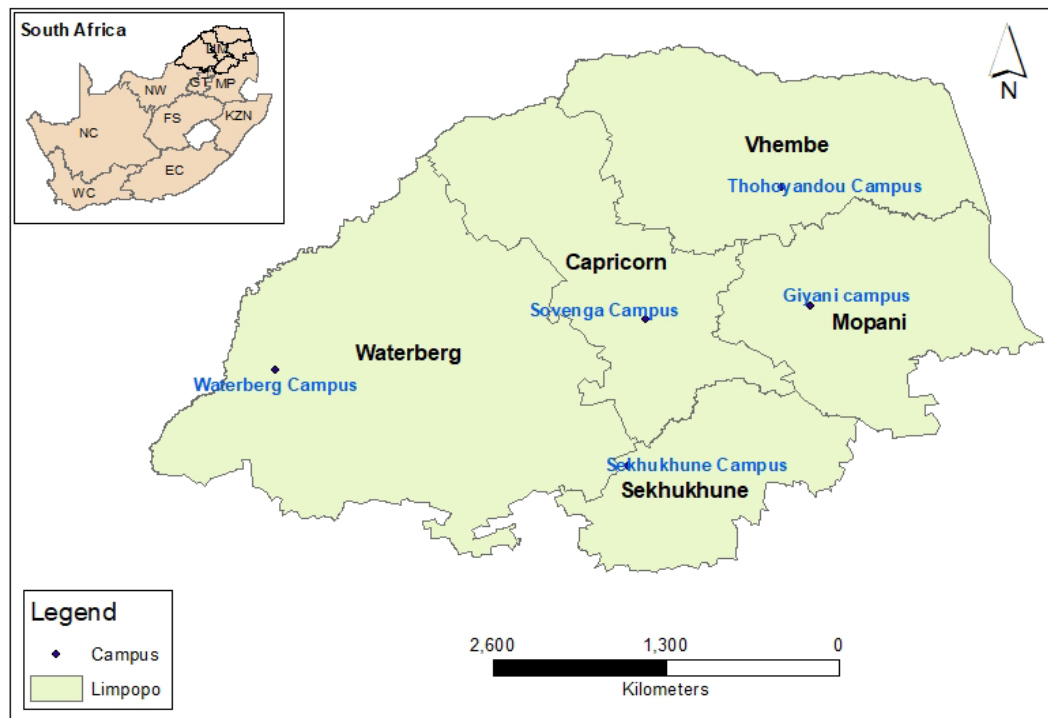


Figure 3.1: Map displaying Limpopo districts where Limpopo campuses are located (Adopted from www.google.co.za/maps/search)

The Limpopo College of Nursing provides a Diploma in Nursing (General, Psychiatry, Community) and Midwifery guided by the R425. Research is introduced in Level 2 in the Social Science module (SSC). Students learn theoretical research in Unit 6 in conjunction with other units and are assessed in Test 4 of SSC. In this study, the researcher utilized three campuses: Thohoyandou Campus which is situated at Khwevha village next to Tshilidzini Hospital, Giyani Campus which is situated next to the old Nkhensani Hospital and Sovenga Campus which shares the fence with

Mankweng Hospital. The researcher utilized the above-mentioned campuses because the Level 4 students are trained in those campuses with experience in conducting group research and they are busy with group research projects. The total number of Level 4 students was 134 for the 2020 academic year.

3.5 Population and Target Population

The population is the entire aggregation of cases in which a researcher is interested (Polit & Beck, 2017:249). In this study, the population was all students who registered for research at Thohoyandou, Giyani, and Sovenga Campuses of the Limpopo College of Nursing. The Limpopo College of Nursing students were chosen as a population of study because these students were conducting group research.

The target population is the entire population in which a researcher is interested and which he or she would like to generalize the study results (Polit & Beck, 2017:747). In this study, the target group was all fourth-year student nurses at the Thohoyandou, Giyani and Sovenga campuses of the Limpopo College of Nursing. The Level 4 students were chosen due to the experience they have on group research.

3.6 Sampling Method

According to Polit & Beck (2017:249), sampling is the process of selecting cases to represent an entire population to permit inferences about the population. A sample is a part of or fraction of a whole, or a subset of a larger set selected by the researcher to participate in a research study (Brink *et al.*, 2017:131). In this study, a non-probability purposive sampling method was used to sample the area and participants. The researcher sampled Thohoyandou, Giyani and Sovenga campuses of the Limpopo College of Nursing because there were Level 4 students who were busy with group research projects. The Level 4 students were selected because of the

experience they have in conducting group research projects.

3.6.1 Sampling of Campuses

A non-probability purposive sampling method was used to select Thohoyandou, Giyani and Sovenga campuses. The campuses were chosen because of the large intake of students registered for the research module and their experience of research. The total number of students at all three campuses was 134.

3.6.2 Sampling of Participants

In this study, a non-probability purposive sampling method was used to sample Level 4 students because they have experience in conducting group research and can give relevant information for the study.

3.6.3 Sample Size

According to Polit & Beck (2017:265), sampling size is the number of people who are going to be available during the study. There were 134 students registered for Level 4 at Limpopo College of Nursing. The researcher intended to interview about eight students per campus or until data became saturated. Though, according to Polit & Beck (2017:497), the sample size in qualitative research has no fixed rule and is determined by data saturation.

3.6.4 Sampling Criteria

The researcher sampled the participants according to the following criteria:

- ❄ The availability of nursing students
- ❄ Fourth-year students who were busy with their research projects for the 2020 academic year.

- ✧ Students who were willing to participate in the study

3.7 Pre-Test

A pre-test is the trial administration of a newly developed measure to identify flaws or to gain a better understanding of how the construct in question is conceptualized by respondents (Polit & Beck, 2017:744). A pre-test was conducted at the Thohoyandou campus since it had the largest number of students. The researcher wrote an email to the Vice Principal to ask permission to conduct a pre-test for the study. The principal delegated staff to inform students about the researcher's intention of conducting a pre-test for the study. The delegated staff accompanied the researcher to where the students were assembled. The researcher met the participants for the first time and made an appointment for a pre-test interview. Students who met the characteristic of the study and who were willing to participate were the ones who form part of the pre-test.

The inclusion criteria were considered for three students who formed part of the pre-test assessment. The researcher conducted the pretest from three (3) students at the Thohoyandou campus to check the phrasing of questions, time management and functionality of the voice recorder. Semi-structured interview guide was used. SThe researcher discovered that more probing skills were needed to get more information since some participants did not like to talk much. They needed a push for them to talk. The questions were relevant to the topic, though the researcher was asking two questions at the same time and discovered that participants only answered one question and left one out. The researcher had to ask the question again and it was time-consuming. The researcher was aware of such a challenge and avoided it in the main study. Furthermore, the researcher learned the skills to paraphrase the questions which participants did not understand. The researcher also assessed

herself in terms of managing time and questioning skills. The voice recorder was checked for functionality and it was working properly and was easy to operate. Time management was good.

In this study, the result of the pre-test also formed part of the main study since the given information was rich and in-depth data that answered the questions and objectives of the study (Brink *et al.*, 2017:140). The information of the pre-test was utilized in this study since the researcher never came across it from other participants in the main study.

3.8 Recruitment of Participants

The researcher asked permission to collect data from the Vice Principals of the campuses using e-mails. The appointments date to collect data was negotiated telephonically with the Vice Principals of the Colleges. All the campuses have a research committee and members delegated to assist researchers who are interested to study with the College. On all the campuses, the principals sent the researcher to a delegated staff member who informed the students about the researcher's intentions of collecting data. The delegated personnel accompanied the researcher to meet participants in the class and it was a first contact session of interview. The researcher secured appointments with the participants. Furthermore, the researcher established a friendly welcoming interview environment and was not in hurry to collect data. A researcher-participant relationship was maintained by communicating with the participants through social media while reminding them about interview appointment dates to prepare a good interview environment. The researcher interviewed only the participants who were willing to take part in the study voluntarily with the appointment made from the very first day we met.

3.9 Data Collection Plan

Data collection refers to the gathering of information needed to address a research problem (Polit & Beck, 2017:497). In this study, data was collected through semi-structured interview guide which was face-to-face interviews. Permission to collect data was given after presenting the research proposal to the Department of Nursing Science at UNIVEN and to the School of Higher Degrees Committee for quality assurance purposes. Furthermore, the researcher submitted the research proposal to the University Higher Degrees Committee and the Research Ethics Committee for quality check and approval. The clearance certificate is (SHS/20/PH/16/0608, Annexure A). The document was also submitted to the Department of Health (DOH) for approval and permission to access the institutions (Annexure B).

Permission to access the Limpopo College of Nursing campuses was obtained from the principals of the three campuses (Annexures C, D, E, F, G and H). The researcher was the only data collector and no assistance was needed from another person. The researcher wrote letters to ask a permission to access the Colleges. Each campus responded in writing. On arrival, the principal delegated to staff who led the researcher to Level 4 students. The researcher was introduced to the students and appointments were made with individual participants. The Colleges provided several venues that could be utilized for data collection. On the interview date agreed with individual participants, a separate arranged venue conducive for an interview was chosen, a venue that was free from noise and any disturbances was selected in each case.

The researcher notified the participants about the study information as indicated in Annexure I before signing the consent forms. The signing of informed consent before participation served as evidence that the research participants were willing to be part of the study (Annexure J). The participants were informed about the use of the voice

recorder and that information captured by the voice recorder would be used for research purposes only and not against the participants. Permission to use a voice recorder was given by the research participants. The participants were also informed that field notes would be taken during the data collection process.

Data collected during lunchtime, after classes and after work as well as utilizing individual free time such as weekends, depending on the appointment with the participant. This was done so as not to interfere with students' classes. The participants were interviewed separately to provide privacy and confidentiality. The researcher utilized communication skills to probe participants for more information until data saturation was reached. According to Polit & Beck (2017:60), data saturation is the point when new data begins to repeat what has already been found.

In this study, the researcher used a semi-structured interview guide to control the interview process (Annexure K). A semi-structured interview is one in which the researcher has a list of topics to cover rather than specific questions to ask (Polit & Beck, 2017:744). The semi-structured interview does not limit participants in answering questions. It allows the participants to raise issues that a researcher may not have considered, but are important for the study.

In this study, participants were given enough time to express what they were going through in research groups. Furthermore, the researcher probed a lot to get more information from the participants. The interview guide also allowed the participants to hear the question in the same manner as the researcher.

During data collection, the participants were free around the researcher, and were seen seeking clarity where they do not understand. The interview lasted between 30-45 minutes per participant, though some participants had more information and their

interview lasted an hour or longer. Data collection and analysis done simultaneously to determine data saturation. During data collection, the researcher saturated at the 4th participant at Thohoyandou campus as the first campus to be interviewed and the researcher continued to the 6th participant who gave the same information as given by others. The researcher progressed to collect data at Giyani campus where data-saturated at the 4th participant and the researcher continue to the 5th participant to determine if there was no new information forthcoming. Indeed, there was no new information that emerged and the researcher stopped at the 5th participant. Sovenga campus was the last campus interviewed where data-saturated at the 3rd participant, and the 4th participant interviewed has not provided new information. The number of participants interviewed was 15. Results of the pre-test were also utilized since it was rich with information and the researcher never met information the same as she got when conducting the pre-test. Therefore, the total number of interviewed participants were 18.

3.10 Data Management and Analysis

Data was read and transcribed to understand the information to get a sense of the whole before breaking it into parts. Participants' information was reflected on how data was collected without changing the meaning of the statements. Furthermore, data was secured to be kept under lock and key for five years to make it safe and for the sake of reference. Data analysis is the systematic organization and synthesis of research data and, in quantitative studies, the hypothesis using those data (Polit & Beck, 2017:725). Data analysis was done following Tesch's open-coding steps (Mutshatshi, Mothiba & Mamogobo, 2020:4) as indicated below:

❖ 1. Get a sense of the whole

In this study, the researcher started by choosing one transcript and read through it

until the end to get a whole sense of the information. The researcher went through the transcript several times to understand the information given by participants on how they experienced the conducting of group research before breaking it into parts. The researcher continued doing the same for the other transcripts

❖ 2. Pick one document

In this study, the researcher selected the shortest interview and read it attentively while analyzing the highlighted meaning. The researcher took note of information such as shortage of resources, lack of time, poor connectivity to the internet, lack of academic support, lack of knowledge of research on students and supervisors, etc.

❖ 3. Read through several participants' data

The researcher read through all participants' data, comparing what was in the field notes, the voice recordings, together with the final written transcripts, to check if the information was the same. Furthermore, the researcher rechecked the data several times to verify information so that no information was left out when compiling transcripts. Besides, the researcher analyzed the information by grouping the same information. The first transcript picked gave a clear idea to a researcher on the information needed to pay attention to. The researcher further looked at other new information that had meaning on what participants had verbalized. A list of topics resulting from the interview was compiled. Similar topics were grouped in a column and arranged as major topics.

❖ 4. Coding process

The researcher referred to a compiled list of topics and rechecked the data for comparison. The researcher abbreviated the topics as codes and wrote the codes next to the appropriate segments of the text.

❖ 5. Categorize the codes

The researcher found the most descriptive wording for codes and grouped them into categories that showed interrelationships. In this study of the experiences of student nurses in conducting group research at Limpopo College of Nursing, South Africa, group codes were categorized into themes and sub-themes.

❖ 6. Make a final decision

The researcher finalized the abbreviation of each category and arrange codes in alphabetical order, meaning that the researcher finalized after developing each theme by rechecking and verifying the data if it corresponded and related to the themes developed.

❖ 7. Preliminary analysis

The researcher arranged the data belonging to each category in one place and preliminary analysis was formed.

❖ 8. Re-cording

The recording was done depending on how data unfolded new information from participants. After recording, data was sent to an independent coder to read and recheck if coding done by the researcher matched the data collected. Data collection and analysis was done simultaneously to determine data saturation.

3.11 Measures to Ensure Trustworthiness

In qualitative research, strategies to establish trustworthiness include credibility, transferability, dependability, and confirmability (Lemon & Hayes, 2020:604). In this study, all the strategies have been applied as detailed below.

3.11.1 Credibility

Credibility refers to confidence in the truth of the data and interpretations of them (Polit & Beck, 2017:559; Lemon & Hayes, 2020:604). In this study, credibility was ensured by prolonging engagement with participants and creating sufficient time to know the participants and for the participants to know the researcher so that they felt free around the researcher and so shared only the correct information without fear of being implicated (Korstjens & Moser, 2018:121). This included spending time with participants to understand how they were experiencing the research process. In this study, the researcher first spent time with participants when she was seeking appointments for data collection. Some participants had more information and interview lasted more than one hour which provided more time to spend with participants. Some participants needed more probes to give information and for them interviews lasted between 30-45 minutes, as stipulated by interview guide.

The researcher was flexible enough so that she could not look for information desperately. Member checking was done to enable the researcher to verify the transcribed information to reflect exactly what was verbalized by the participants. Data collected reflected only the responses from the participants and no other information about the student experiences in conducting group research was added to modify statements elicited from the participants. The evidence of data collected reflected the voices of the fourth-year nursing students verbalizing the same information as interpreted by the researcher in the research report. Engagement with participants was prolonged until data saturation was obtained. An independent coder verified if coded themes matched the information given by the researcher.

3.11.2 Dependability

Dependability refers to the stability of data over time and conditions (Polit & Beck,

2017:559). This refers to the provision of the evidence such that if it were to be repeated with the same or similar participants in the same or similar context, its findings would be consistent (Brink *et al.*, 2017:127). For this study, the researcher utilized an interview guide to explore and describe the experiences of student nurses in conducting group research. The interview guide was presented to experts such as supervisors and the lecturers in the College who were supervising group research projects to add their inputs. The interview guide assessed all the information that needed to be assessed. The interview guide was tested before it was used on the participants to find out if it measured what it was supposed to measure. Data collected reflected only the true responses from the participants (Korstjens & Moser, 2018:121; Lemon & Hayes, 2020:604). The interview guide was also assessed by a peer group for inputs. The provision of evidence was presented in such a way that if it needs to be repeated with similar participants in the same context, the findings would be the same.

3.11.3 Confirmability

Confirmability refers to objectivity, i.e., the potential for congruence between two or more independent people about the data's accuracy, relevance or meaning (Polit & Beck, 2017:559). In other words, the findings are based on the participant's responses and not potential bias. In this study, the data collected reflected only the information from the participants and no other information was added to modify statements (Korstjens & Moser, 2018:121). The transcripts and voice recordings were presented to the supervisor (Annexure L). Voice recordings would be kept under lock and key for about five years for future reference before their erasure. Participants' information was reflected based on how data was collected without changing the meaning of the statements.

3.11.4 Transferability

Transferability refers to the potential for extrapolation, i.e., the extent to which findings can be transferred to or has applicability in other settings or groups (Polit & Beck, 2017:560). In this study, dense descriptions were achieved through the provision of a sufficiently detailed description of data within the given context (Amin, Norgaard, Cavaco, Witry, Hillman, Cernasev & Desselle, 2020:1477; Lemon & Hayes, 2020:604). A non-probability purposive sampling method was used to select the participants who were knowledgeable about the phenomenon. The Level 4 nurses were appropriate participants who gave the researcher relevant information since they had more experience in conducting research. Data saturation was reached when the participants were no longer giving new information to the researcher.

3.12 Ethical Considerations

Research ethics involves the protection of the dignity of the participants and the publication of the information in the research. In this study, ethical considerations were ensured throughout the study to protect the rights of the participants and institutions. The researcher sought permission to conduct the study. Informed consent, voluntary participation, confidentiality, privacy and protection of the participants from any harm were considered.

3.12.1 Permission to Conduct the Study

The researcher presented the research proposal to the Department of Nursing Science in UNIVEN and the School of Higher Degrees Committee (SHDC) for quality assurance purposes. Furthermore, the researcher has submitted a research proposal to the University of Venda Higher Degrees Committee (UHDC) and the Research Ethics Committee for quality assurance and ethical approval of the study (Annexure

A, Clearance No: SHS/20/PH/16/0608). The proposal was also submitted to the Department of Health for approval and permission to access the institutions. Permission to access the Limpopo College of Nursing campuses was obtained from the principals of the three campuses (Annexures B, C, D, E, F, G and H).

3.12.2 Informed Consent

A Letter of Information (Annexure I) was given to participants to familiarize themselves with the study. Furthermore, the researcher read the information explaining everything written on the Letter of Information for the participants to be sure of what was expected of them. After the participants were familiar with the content and what was expected of them, the researcher informed participants about the Informed Consent (Annexure J). Informed consent is an ethical principle that requires researchers to obtain people's voluntary participation, after informing them of possible risks and benefits (Polit & Beck, 2017:731). Participants were given a written consent form to fill as evidence that they were willing to participate in the study. The names and cell phone numbers of the researcher were written on the consent form. The objectives and purpose of the study were provided to the participants. Assurance of voluntary participation was emphasized to participants and they were told they could withdraw from the study at any time as they wish without any penalties. Permission to use a voice recorder in this study was requested from the participants.

Participants were assured that their information would not be used against them. The researcher did not reveal participants' information and participants were not identified by names to maintain privacy. The information given by participants was kept confidential and would be stored for about five years in case it is needed for clarity and reference of the study. No verbalizations of names were allowed during the study or during transcribing the interviews for confidentiality. The researcher ensured that

all information provided by participants used only for study purposes. Everything that participants verbalized was kept confidential. There was no money or any form of reward that participants were given for taking part in this study, therefore, participation was voluntary (Annexures I and J).

3.12.3 Beneficence

Beneficence imposes a duty on researchers to minimize harm and maximize benefits (Polit & Beck, 2017:139). The researcher protected the participants from any harm and discomfort, either physically or emotionally (Brink, 2017:34). The participants in this study were protected from physical harm, emotional harm or injuries and they were never exploited. In this study, there were no procedures that inflicted pain to participants. The participants were provided with all the information needed before they agreed to participate in the study. The Letter of Information was given to the participants to allow them to read it themselves (Annexure I). Furthermore, the meaning of what is meant by a letter of information was explained to the participants so that they would take part knowingly. No information was used against them. The researcher maximized the benefits to the participants by providing them and the principals of the Colleges with the findings of the study.

3.12.4 Confidentiality and Anonymity

In this study, none of the participants was addressed by name. The information provided by participants remained confidential between them and the researcher.

3.12.5 Respect for Human Dignity

Respect for human dignity is the principle that includes the right to self-determination and the right to full disclosure (Polit & Beck, 2017:140). For this study, participants

had the right to be respected and to choose whether to participate in the study or not. Participants were given a Letter of Information (Annexure I) with full disclosure of the study and Consent Forms (Annexure J) to read and sign before they participated in the study. The researcher also explained to the participants the information contained in the Letter of Information and Consent Form which stated their right to decide whether to participate in the study or not. The researcher further explained to the participants that they would withdraw from the research study at any time without incurring any penalties.

3.12.6 Principle of Justice

The principle of justice implies that participants of a study have a right to fair treatment and their right to privacy (Takala & Häyry, 2019:8). Participants were treated equally and given an equal chance to be selected in the study. Respect for privacy was honoured by not divulging the information gathered from the participants. Respect for students was also observed by allowing them to participate in the study willingly (Brink *et al.*, 2017:97).

3.13 Summary

This chapter described how the study applied the methodology chosen, the design, population and sampling methods, pre-test result, the method of data collection, method of analysis, measures to ensure trustworthiness and the ethical issues in relation to this study. The next chapter encompasses the analysis, presentation and interpretation of the results of the study.

CHAPTER 4

ANALYSIS, PRESENTATION AND INTERPRETATION OF THE RESULTS

4.1 Introduction

The previous chapter presented the research methodology and this chapter focuses on the interpretation and discussion of the results. The purpose of this chapter is to present interpretative insights into the findings. Therefore, the data collection process was done through one-on-one interviews. The research results are cited by direct quotations from the participants' experiences of conducting group research with the integration of the literature review and the methodology chosen.

4.2 Discussion of the Results

The participants interviewed were Level 4 students from Thohoyandou, Giyani and Sovenga campuses of Limpopo College of Nursing. Of the total of 14 participants interviewed, 9 were females, 5 males and their ages ranged from 20 to 26 years. The participants were Venda, Sepedi and Tsonga speaking, however, interviews were conducted in English. Each interview was planned to last between 30 and 45 minutes, although some exceeded this time limit as more probing was done to enquire more information from the participants. Collection of data was done through a one-on-one interview with the participants until data saturation occurred. The gathering of data was done and the researcher transcribed the data individually.

Table 4.1 summarises and represents the demographic data for this study.

Table 4.1: Demographic data of the participants

Location	Thohoyandou Campus	Giyani Campus	Sovenga Campus
Number of participants interviewed	6	5	4
Females	2	2	2
Males	4	3	2
Age (Years)	20-26	22-26	20-25
Pre-test results	3	N/A	N/A
Total participants	18		

Repeated listening to the audio-recorded data, comparing with written field notes and rereading of the transcripts ensured that all information was adequately and completely captured. Transcription of the interviews was done by capturing the audio data on a computer followed by repeated reviewing of the transcripts in order to identify recurring responses which helped to generate the themes. Data collected was analyzed further following Tesch's coding steps as previously outlined (Botma, Greeff, Mulaudzi & Wright, 2010:224) and as indicated in the study plan (Section 3.10). The findings were derived from the experiences of student nurses in conducting group research as evidenced by the students' own voices. The main themes and sub-themes developed from the data. Table 4.2 indicates the themes and sub-themes in line with the study objectives. Detailed discussion of the themes and sub-themes is supported by direct quotations from the participants' experiences, as well as evidence-based information in the literature review as presented below:

4.2.1 Theme 1: Experiences of Working in a Group

Participants felt that they had been exposed to group research work which was a good experience for some group members. The groups agreed that it was a beneficial learning opportunity for them, however, a lot has been encountered during the very

same learning exposure. The moment students were introduced to research, they were exposed to the forming stage of Group Development Theory (GDT) where members met for the first time and interpersonal relationship began (Jones, 2019:25). Three sub-themes emerged as (1) Too large groups, (2) Poor participation in the group and (3) Inadequate knowledge in research.

Table 4.2: Summary of themes and sub-themes developed from the transcripts

Objectives	Themes	Sub-Themes
To explore the experiences of student nurses in conducting group research	1. Theme 1 Experiences of working in a group	1.1 Too large groups 1.2 Poor participation in the group 1.3 Inadequate knowledge in research
To describe the experiences of student nurses in conducting group research	2. Theme 2 Facilitation of working in research groups	2.1 Lack of research expertise by the facilitator 2.2 Different and conflicting research views from facilitators 2.3 Poor supervision role
	3. Theme 3. Challenges faced by students when conducting research in a group	3.1 Insufficient time allocated for research 3.2 Lack of resources 3.3 Lack of support, e.g., funds, data, internet connectivity

4.2.1.1 Sub-Theme 1.1: Too Large Groups

The study revealed that participants were placed in large groups for research projects. Furthermore, the study indicated that too large groups was problematic to participants as it was difficult for them to manage. This is evidenced by participants indicating the number of group members they had in their group research.

P8 “We are twelve I think. ... jaa.”

P9 “In our research group? I’m not sure but we are more than ten.”

P10 *“We are eight.”*

P11 *“Some students like motivation. Out of ten students, you will find only five are the ones who are active and fully participating ...”*

P12 *“We are twelve. The other ones left in level three because they failed the class. We were fourteen.”*

P13 *“We are fifteen.”*

Similar findings were reported by Monson (2017:242) who stated that a group that has more than seven members is regarded as a too-large group. It has been further noted that large groups are difficult to handle and it promotes the reality of social loafing, free-riding tendencies and conflicts which are the root cause of the storming phase in the learning groups (Milinga, Kibonde, Mallya & Mwakifuna 2019:27). Similarly, other scholarly research indicated that an ideal group size is recommended for fostering effective learning and is easily manageable and should accommodate about seven members (Ihm, An & Seo, 2017:745; Monson, 2017:242; Alfares, 2017:248). The storming stage in GDT is also backing the evidence that where there is a group of people, tension is likely to arise which could be problematic to the group (Hildebrandt & Marr, 2020:219). Too large groups created environments with many tensions and conflicts for Limpopo College of Nursing students.

4.2.1.2 Sub-Theme 1.2: Poor Participation in the Group

The study findings disclosed that not all group research members were actively participating in the group research. Some members were reported to be lazy, others did not know what was expected of them while many were seemed not to be bothered by their group research task, but depended upon others' efforts. The following

statements indicated by the participants illustrate the case:

- P1** *“Sometimes you find “uri” they are passive in a manner that it’s only a few who are interested in conducting of research. There is not much idea shared ... and others are not taking research seriously. It increases a workload to those who are serious.”*
- P3** *“Another challenge is that; as a group, you find sometimes the members are reluctant to come to gather to discuss research ... another challenge that I have noticed is that, when we are working as a group we are all reluctant to work because we assume that specific work will be done by someone whereas no one is working on that matter.”*
- P4** *“You find that someone is lazy to type and we have a lot of work.”*
- P5** *“They don’t ... they seem not to like or want to participate. Some seem not to have ideas at all so it becomes a challenge as we are doing this thing as a group ...”*
- P6** *“Some of the group members are not participating at all, meaning that only a few of us have to participate. So they are not giving any inputs or anything or any information. They just come and be there for the sake of coming.”*
- P7** *“Jaa, sometimes because some members are not that involved. There is not much contributing and lazy to look for information jaa. That is the challenge that we are facing ... Some members of the group continue to chat through WhatsApp with their friends or with who so ever they may be chatting with, so they are not complying with those group norms and it hinders our progress.”*

P11 *“... again with the group, you find that we are about ten. You find most of the students do not understand what they are expected of, in group research.”*

Similar findings have been shared by (Mittelmeier, Rienties, Tsempelaar & Whitelock, 2018:150), namely that placing students into groups does not always produce the desired effects of collaborative learning. Therefore, cases such as social loafing and free-riding behaviour do occur and creates some tension in the group (Lin & Huang, 2020:91; Milinga *et al.*, 2019:27). The same sentiment had been echoed by (Guangul, Muhammed & Chikere, 2018:1383) who suggested that it's better if students are offered time to present their group task so that they become more attentive, active as they will keep mind to the presentation to follow. Thus, active involvement of members would be viable. Poor participation caused stiffness to other group members, which caused the group to experience the storming phase of GDT. While other students remain to be active, the norming phase was experienced concurrently with the storming phase by those few students who decided to carry a burden of the work.

4.2.1.3 Sub-Theme 1.3: Inadequate Knowledge in Research

The study findings showed that students at Limpopo College of Nursing lacked background knowledge of research while others have insufficient knowledge of research. The findings further proved that the research module carried new concepts which demanded more effort from students and makes it difficult for them. The following statements from the participants are worth quoting regarding these issues:

P2 *“... Not at all, as I said before, the things that we do are to copy or taking examples of what other people have done. that is not enough in a point that I have to say that I have enough knowledge.”*

- P3** *“Alone? I think I’m still facing challenges when it comes to research, I can’t conduct it alone even after.”*
- P4** *“Mmm ... here is ... qualitative and quantitative (participant was not sure of the methodology he is approaching in his research. He was trying to remind himself of those types of methodologies). its qualitative ma’am.”*
- P6** *“Because as I said, I don’t know anything about research, so in a group research, some have light because some are from other universities before they come here. At least they have light and they can give us direction on the group research. On my own I don’t think I can cope.”*
- P7** *“Not everything, let me say 60% of it because it is still challenging even if we conduct research as a group. I will say 60% is the work I can do on my own when conducting research.”*
- P10** *“It means that they are a burden to the group. They don’t know anything but, in the end, they will have a qualification that says they have researched about this and that which is some sort of liar because they don’t know anything. That way you find that there are people with qualifications at work but they do not know the work or they are not competent.”*
- P14** *“According to me, I haven’t learned enough so I can’t be an independent researcher because I think from level two where we did research theory, I was not in love with the research. I was failing it when we come to level three because I was not having knowledge of research. I end up asking myself that will be I be a good researcher in the next coming years? My answers were like no I think I want to be a good researcher but it is too late.”*

Group research is not problematic only to students of Limpopo College of Nursing. It has been observed that most first-time researchers lacked knowledge, the experience of research and therefore they struggled a lot to understand directions (Sumaila *et al.*, 2020:156). Similarly, it is at this point in the students' lives that the gap between theory and practice is being bridged (Alsied & Ibrahim, 2017:147), therefore, students' prior knowledge of research and focus is needed. A very similar idea has been supported that research itself demands investigators who are knowledgeable to successfully conduct a study (Sumaila *et al.*, 2020:156). Thus, conducting group research without background knowledge of research makes it difficult, especially when handling the group matters concurrently with the research process as basic students. Normally students lacked knowledge at the beginning of the group before research introduction took place. This was a period of forming stage of GDT where a great deal of dependence upon experiencing task was observed (Jones, 2019:25).

4.2.2 Theme 2: Facilitation of Working in Research Groups

The study showed that participants were facilitated in their group research projects, however, participants felt that they were not satisfied by the facilitation process. Three sub-themes emerged as (1) Lack of research expertise by the facilitator (2) Different and conflicting research views from facilitators (3) Poor supervision role.

4.2.2.1 Sub-Theme 2.1: Lack of Research Expertise by the Facilitator

The study findings indicated that facilitators at the Limpopo College of Nursing did not show competency and skills when supervising research groups. Therefore, the study showed a gap of lack of expertise in supervising research groups. Some participants remarked as follows:

P1 *“Yes, they do give us guidance, but most of the time you find*

“uri” [meaning “that”] the lecturers themselves they don’t actually understand what the guide is talking about, because you find “uri” obviously as students and individually groups we compare each other’s research document and everything. You find that the way your facilitators have told you to do research or follow the guide; is not the way in which the others lecturers have told others to follow the guide. You find that there is confusion there. You don’t actually know “uri” which one is the right process and which one is the wrong one.”

P2 *“Then we do as they say and then when we do, as they say, we take back research proposal for them to correct it but then they don’t actually explain further. I don’t know how to put it but “ke tla reng” [which means “what can I say?”] We don’t actually get to the point where we understand what we did. But then, if we try to look back and try to think about what actually research consist of, we can’t really talk “uri” actually when you conduct research we must do this, this and this.”*

P6 *“Like maybe if ever you are doing data collecting, you have to come with data already being collected regardless whether you know or you don’t understand what is happening with data collection. While the reason for us to go to facilitator is to ask him/her on how data is collected.”*

P8 *“They choose two facilitators for us, but it happens that those facilitators sometimes take our research to other facilitators that are not facilitating us for consultation. We got a problem there because those facilitators used the strategies they are utilizing when facilitating their group to us. We got confused because we were not utilizing the same strategy before. They liked the problem statement to be in a point form and the other one’s not. The other one wants arrows as the bulleting, etc.”*

P11 *“With my experience, our facilitator gives us the previous*

research for us to compare. When we add information or when we do it differently from the previous research document, they asked us why we are doing it differently. for me, it discourages because is like we need to copy whatever they have given us without implementing new ideas and stuff like that.” “again ... I felt like the orientation was a summary of the practicality part of it. Maybe I missed part of the information that other students got. I did not fully grasp the orientation. The orientation was too short or scanty information if I can say.” “I think some of them are not fully ... what can I say? ... they don’t have research skills. They don’t have enough knowledge or education on research. So that’s where the problem comes in. Our facilitators were consulting from other components facilitators, to indicate that she does not have that much knowledge of research.”

P12 *“Conducting group research is difficult more especially the way they taught us on how we should do research. It was not enough information, the way they presented it eish ... I think the lecturer’s skill of informing us research was like inadequate. It took us time to come up with research proposal. We also struggle to come up with the topic as well as literature review. It was problematic to us.”*

Several studies corroborated that even though supervisors put more effort into nurturing the development of novice researchers, some still lacked research skills and knowledge in supervising student researches (Javaid & Hussain, 2018:710; Hadi & Muhammad, 2017:178; Niemczyk, 2018:180). Further research stated that supervisors lacked a guide to use in instructing the students in working in a group (Rezaei, 2018:10). It has been shown that many supervisors’ attempts to guide student researches are grounded in their mentors’ own past experiences (Niemczyk, 2018:180). Moreover, supervisors blamed the challenges such as researchers’ high volume of teaching and pressure to publish, limited time due to heavy teaching loads,

pressure to conduct research and publish, and substantial administrative and service responsibilities (Niemczyk, 2018:180).

4.2.2.2 Sub-Theme 2.2: Different and Conflicting Research Views from Facilitators

The study provided evidence that there were more group research facilitators from different schools of thought, who gave different research directions which contradicted and ended up confusing the participants. It is exemplified in the following selected statements made by the participants:

P4 *“Eee ... because we really get an opinion from different facilitators. It really confuses us, now at the end of the day you don’t know the correct thing to do because you do the A’s thing and they tell you to do the B’s thing and at the end, the process confuses us.”*

P6 *“It is very frustrating because if ever we are submitting our research we need to provide four photocopies and we give them each. Everyone has their own way of doing research. They will tell you this way, then you do it their own way but then the other supervisor says this is not done this way; so it is very frustrating.”*

P7 *“We have experienced some moments where one lecturer is telling us, you should do this in a particular way and the other one tells us we shouldn’t do it. It is frustrating because we are not sure which things are right, which things are wrong because we are not familiar with research.”*

P8 *“You keep on correcting things and the people who facilitate us keep on rotating our research proposal among themselves. They don’t get together and discuss to say no this part should*

be ... everyone is coming up with his/her part. Ok, we work on it and take the work to another facilitator. When that person comes back, she complains and says no this is not the way I told you to do. When we tell ma'am that we went to other facilitators because you were not around, the other one told us to do it this way. So we just go back and forth."

P11 *"When you conduct it, you go to one facilitator and then the facilitator tells you to do the particular thing. When you go to another facilitator he tells you to remove what the first facilitator tells you to add."*

P12 *"The thing is that the people who need to help us especially the facilitators from the component with us, gives a different opinion on one content and it is difficult to implement. One will give us this and the other one gives us that. We end up being confused. We don't know what to do or take for corrections."*

P14 *"We have two supervisors, the other one is a lady and the other is a man. So the male one gives us the work and corrections. When we meet we give the lady work and she will reject it."*

The idea of having more than one research supervisor has been supported by Shannon (1995:1) who found it worthy to have more than one research supervisor for efficiently and effectively smooth running of a research student's supervisory roles. In controversy, up till now, it is acknowledged that working with multiple supervisors resulted in differences in expectations, varying departmental standards of how supervision is undertaken, different understandings of supervisory tasks, and sometimes supervised by beginners with no supervisory experience at all (Grossman & Crowther, 2015:1). The study further indicated that multiple research supervision could give rise to any number of inconsistent approaches. Though it was found advantageous to have more than one research supervisor in a group, consequently,

students should not be caught in between supervisors' inconsistencies (Lee, 2018:889).

4.2.2.3 Sub-Theme 2.3: Poor Supervision Role

This study revealed that despite the lack of expertise by the group research supervisors, there was a poor supervisory role executed by group research supervisors. Other participants profoundly explained this as follows:

- P10** *"When they facilitate, they don't pay attention to the students, they facilitate the work. They check the work if it is correct or not. They only want work done."*
- P2** *"Not at all, as I said before, the things that we do is to copy or taking examples of what other people have done. that is not enough in a point that I have to say that I have enough knowledge."*
- P6** *"Like maybe if ever you are doing data collecting, you have to come with data already being collected regardless whether you know or you don't understand what is happening with data collection. While the reason for us to go to facilitator is to ask him/her on how data is collected."*
- P7** *"Then after we take the document to facilitator and that facilitator had to crush whenever we are already done. Jaa it frustrates us."*
- P8** *"They don't work together, because if we are having two facilitators they should meet and discuss our document. Instead, it happens that one takes our document and does her own corrections while the other one is not there. When the other one comes the other one is not there ... so we find it*

difficult to adjust because every and each one demands something from the same point or different point from the same point.”

P12 *“It is because, during that period allocated, we do not have a supervisor to help us with the corrections. So we do not want to do corrections which we are not sure of. If we force ourselves to do it and submit, we are still going to do it again because they will crush everything. We just end up saying let leave it guys and study something because there is no way forward. Initially, the supervisor will give you input for research to go and implement. When they go and discuss as lecturers, the other one will come with this and the other one with that. When you implement they come and crush it.” (participant laughing).*

P14 *“We don’t have progress in learning research. It delays us. We consult there and there but we gonna be told a lot of stories which you don’t know what to take.”*

Other studies emphasized that despite the recognized efforts supervisors put in for students to complete their research studies, it is well-known that not all supervisors have an interest in their work while others are unable to notice mere signs of student difficulties in progressing to the next step to intervene (Muthanna & Alduais, 2020:2). However, some supervisors do not have enough experience in different methodologies. As a result, they allowed their students to copy from studies that have been conducted by other researchers (Alsied & Ibrahim, 2017:147). Additionally, some supervisors fail to interact and poorly communicate with students and are only interested in work done than who did it (Heyns *et al.*, 2019:2). Such supervisors do not encourage their students towards creativity or engaging them to become members of the scholarly community (Muthanna & Alduais, 2020:2). While some challenges

investigated include little or no interest in research, absence of the supervisor from work, and not coming to work punctually which later hinder the progress in student's research (Alsied & Ibrahim, 2017:148).

4.2.3 Theme 3. Challenges Faced by Students When Conducting Research in a Group

The study revealed that students at Limpopo College of Nursing experienced challenges when conducting group research. Three sub-themes emerged as (1) Insufficient time allocated for research (2) Lack of resources and (3) Lack of support.

4.2.3.1 Sub-Theme 3.1: Insufficient Time Allocated for Research

Results of this study indicated that there was insufficient time allocated for the research module which resulted in too much tension from students and it had negative consequences on learning of research as well as the final results. Almost all participants elaborated as follows:

- P1** *“Can you see? So is a bit challenging because you are also given a time like ... I said that is a bit small.”*
- P2** *“Yes, because as I said before that the other barrier is a short time of us not going deep into research details. So if they can extend the time of teaching us research or giving us knowledge of us like doing research. I think that is going to be way too better.”*
- P3** *“Another challenge is that research required a lot of time. Jaa (it means yes) it takes time. we need to balance other theory parts/ modules and research at the same time. so it is time-consuming for us.”*

- P5** *“No, I don’t think it will be enough time for research because we turn to research on our personal time.”*
- P6** *“Yes, it is not enough because it is only one period for three hours once a week. At least if there can give us a whole day for research in a week it will be better.”*
- P10** *“We don’t have enough time to learn. Some may not be interested to use their spare time. You will have others saying we are tired and we need to learn other subjects. There is nothing you can do about it. We are not benefiting from two and half hours.”*
- P11** *“I can’t say there is enough time. On top of research, there are other modules that we need to focus on. Research is another work on top of another work. There is never enough time to conduct research.”*
- P13** *“I feel like I don’t have the research skill based on time allocated for doing research. I feel like doing research once or twice a week is not enough. I could try because I know some of the basics of research. There is a lot of things we are focusing on here in the College. So, time is also limited to can master research even if you are exposed to.”*
- P14** *“If we could at least have two periods per week it would have been better.”*

Though what we expected when students are conducting group work was to enjoy all the benefits, the challenges were most frequently reported as stumbling blocks in completing research projects (Havenga & Sengane, 2018:2). The issues around lack of time when carrying out group research studies have been reflected by several scholars as to the biggest stumbling blocks when conducting a research study

(Havenga and Sengane, 2018:2; McKinney & Cook, 2018:14; Poort Jansen & Hofman, 2019:9; Alfares, 2017:252; Alsied & Ibrahim, 2017:148). Alsied & Ibrahim (2017:148) shared a similar sentiment about the time allocated to conduct research.

4.2.3.2 Sub-Theme 3.2: Lack of Resources

This study also found that there was a lack of resources to support group researchers at Limpopo College of Nursing. Participants had reflected a lack of stationery, computers, printers and cartridges, internet connectivity and many more. The following statements made by the participants supported the lack of resources when conducting group research:

- P4** *“I think because of the government and shortage of everything; if you want to print they will tell you that there is no paper or toner. So that contributes for us to go to use the University of Limpopo’s printer. They don’t allow us because of shortage of papers and toner.”*
- P6** *“We don’t have lap-tops because here lap-tops are not used frequently, we mostly use books”*
- P9** *“We use our personal laptops, our personal data for the internet. No Wi-Fi on the campus. So, in terms of resources, we use our own. The only resource that I can say we are being provided with is a link. The research supervisor gives us links and they just say you can go on this website and find the information ... the library is not updated. It does not have computers that we use. It has old books. Jaa it is not well equipped. It is poorly equipped.”*
- P10** *“Yes, if we need to buy USB (Universal Serial Bus), printing and transport money, we get it from fine paid by group*

members.”

P12 *“We do have rules. For late coming, we fine them and the money they pay we used it to print and photocopying things like that.”*

P13 *“When we have to type a work in a group. People have to bring own computers but no they do not bring them. I used to bring mine and now I stopped because people are not willing to come up with theirs or to borrow from their close friends. So that we can type very quickly. These are the kind of problems we are facing.”*

Lack of resources was pointed out by the study findings of the work conducted by Sibanda *et al.* (2019:119), which stated that in almost all rural higher learning institutions, there is a serious lack of research resources such as well-furnished libraries, Information and Communication Technology (ICT) gadgets, competent library staff, and adequate research equipment and facilities. The performing stage of GDT is revealed here, where students lacked resources to work with, but they improvised for a work done collaboratively (Griffith, Bartley & Crane, 2019:1320).

4.2.3.3 Sub-Theme 3.3: Lack of Support

The findings of the study pointed out that students at Limpopo College of Nursing lacked support when they conducted group research projects. The participants verbalize much on how they funded themselves in group research. This is typified by the following participant's quotations:

P12 *“We don't have funds for research ... We are not even funded by at least one laptop to the group. The only provide users with the transport when we need to go for data collection. The other*

cost we do it by ourselves is even the printing of the document ...”

- P8** *“... a thing of photocopying or printing questionnaires have done with our own money because we heard that there are no papers in this school and we have to provide ourselves with it. It means that we have to buy all the material for research on our own.... It affects us because when we give ma’am our work with a memory stick, she asks for it in a hard copy and you find that by that time we don’t have money. It is a pile of papers that we need to print out and no one has money or very few have but they can’t pay for the whole group. They want a hard copy of the research document so that they can circulate it among themselves to see how research goes.”*
- P6** *“Like maybe if ever you are doing data collecting, you have to come with data already being collected regardless whether you know or you don’t understand what is happening with data collection. While the reason for us to go to facilitator is to ask him/her on how data is collected.”*
- P7** *“Then after we take the document to facilitator and that facilitator had to crush whenever we are already done. Jaa it frustrates us.”*

The findings have been supported by the study conducted by Denison, Pham & Kim (2017:19) who discovered that some higher learning institutions provided limited support to group research, little facilitation, and failed to understand group research composition and how it works. Furthermore, there was a lack of formal training for group members on how to work effectively together, and lack of formal training for instructors and team leaders on how to effectively structure and manage groups have been recorded (Theobald *et al.*, 2017.2).

4.3 Summary

Chapter 4 of this study discussed the results and interpretation thereof. According to the study results, students at Limpopo College of Nursing conducted research in too large groups, not all group members were actively participating in group research projects, there was inadequate knowledge of research on students, lack of research expertise by the facilitator, different and conflicting research views from facilitators, poor supervision role, insufficient time allocated for research, lack of resources, lack of support, e.g., funds, data and internet connectivity. The next chapter discusses the study findings and the literature control.

CHAPTER 5

DISCUSSION OF THE RESULTS AND LITERATURE CONTROL

5.1. Introduction

The previous chapter discussed the findings of the study which revealed that students conducted research in too large groups, not all group members were actively participating in group research projects, there was inadequate knowledge of research on students, lack of research expertise by the facilitator, different and conflicting research views from facilitators, poor supervision role, insufficient time allocated for research, lack of resources, lack of support e.g. funds, data, internet connectivity. Chapter 5 discusses the study findings in detail with emphasis on the themes and sub-themes and the discussion is supported by a literature control.

5.2. Discussion of the Themes and Sub-Themes

The experiences of working in a group, facilitation of working in research groups and challenges faced by students when conducting research in a group were the three main themes developed after data analysis. Sub-themes also emerged from each main theme and they are discussed below.

5.2.1. Theme 1: Experiences of Working in a Group

Students go through a research experience whether individually or in groups and they always experience situations differently in a group (Sumaila, Ankoma-Sey, Asamoah & Quansah, 2020:149; Mesquita & Lopes, 2018:9802).

Several studies have provided ample evidence that it is common for students to learn in groups that promote collaboration and generate new ideas (Park, Long, Choe & Schallert, 2018:20; Buchs, Filippou & Pulfrey, 2018 :1; Mesquita & Lopes, 2018:9803). In the normal path of life, there are some stages where students encountered negative and positive experiences through the process of working in groups (Park, *et al.*, 2018:20). However, proof indicated that when a negative experience is encountered, it is a most stressful experience for some students, especially the active team members (Milinga *et al.*, 2019:27). Although student's individual experiences in a group research project do not seem to directly affect learning (Monson, 2019:125), negative experiences have effects on the learning of students, more especially in pursuing their research studies.

5.2.1.1. Sub-Theme 1.1: Too Large Groups

According to the study findings, some groups had more than seven members which indicates too large groups (Monson, 2017:242). It has been noted that large groups are too much to handle and it promotes the reality of social loafing and free-riding tendencies and conflicts (Milinga, Kibonde, Mallya & Mwakifuna 2019:27; Monson, 2019:125; Mesquita & Lopes, 2018:9803). Another study confirmed that group size, gender composition, racial composition and the presence of one or more high-achieving students could cause conflicts within the groups (Monson, 2019:125). Furthermore, when group members are too many, other group members may deceive, manipulate, betray the trust of others, while misunderstanding other group members' intentions or messages could lead to group conflicts as well as disorganization (Venditti & McLean, 2014;30). The storming stage in GDT also corroborates the evidence that there are periods where group members don't get along and conflicts arise (Bonebright, 2010:114). For the growth of the group, participants should expect the conflict, to look at the root course of the problem, to resolve problems on their own

and achieve the objectives of the group (Suifan, Alhyari & Sweis, 2019:96; Park *et al.*, 2018:20; 2018:23). Similarly, other authors indicated that about seven members is the ideal group size recommended that would foster effective learning, is easily accommodated and manageable (Ihm, An & Seo, 2017:745; Monson, 2017:242; Alfares, 2017:248). However, not only large groups are affected by their negative experiences in relation to composition and interaction, but small groups are challenged by aspects such as size and gender composition as well (Monson, 2019:125). Regardless of all the aforementioned notions, the success of a group is not only contingent on a small size group, but also on prior knowledge of the individuals and the social relations developed within the group (Mesquita & Lopes, 2018:9803). Consequently, the study further indicated that group formation influences both task and knowledge development (Mesquita & Lopes, 2018:9803).

5.2.1.2. Sub-Theme 1.2: Participation in the Group

Groups don't always produce desirable effects for learning (Mittelmeier *et al.*, 2018:150; Milinga *et al.*, 2019:28). Therefore, cases such as social loafing and free-riding behaviour do occur and creates some tension in the group (Opdecam & Everaert, 2018:223; Milinga *et al.*, 2019:27). Participation in a group is more than just communicating individual work and ideas to the group, but then to represent the construction of shared meanings for conversations, concepts, and experiences (Mesquita & Lopes, 2018:9803). Therefore, we cannot say there is group participation when ideas and opinions come from very few participants. Since not all members share a common background and uniform knowledge (Mesquita & Lopes, 2018:9803), group participation is determined by whether students are familiar with the allocated task or not (Goudeau & Croizet, 2017:7). Despite the potential of teamwork, groups may also experience augmentation between individual members, leading to wasted time and feelings of discouragement (Park, Long, Choe & Schallert, 2018:22).

Individuals may also have their competence challenged, causing a feeling of threat, reducing the exchange and integration of information platforms and, consequently, impeding the success of the group (Buchs, Filippou & Pulfrey, 2018:1). The sentiment had been shared by Rezaei (2018:7) as evidence of the storming stage in GDT (Bonebright, 2010:114). To promote participation, students should be informed in time and offered time to present their group tasks (Guangul *et al.*, 2018:1383). Furthermore, the study indicated that during group work, students will focus knowing that presentation will follow and thus active involvement of members would be viable (Guangul *et al.*, 2018:1383).

5.2.1.3. Sub-Theme 1.3: Inadequate Knowledge in Research

Research is not problematic only to students at Limpopo College of Nursing. It has been shown that most first-time researchers lacked knowledge, the experience in research and therefore they struggle a lot to understand directions (Sumaila *et al.*, 2020:156). Similarly, it is at this point in the students' lives that the gap between theory and practice is being bridged (Alsied & Ibrahim, 2017:147). A very similar idea has been supported that research itself demands investigators who are knowledgeable to successfully conduct a study (Sumaila *et al.*, 2020:156). Therefore, conducting group research without background knowledge makes it difficult, especially when handling the group matters concurrently with the research process as basic students.

5.2.2. Theme 2: Facilitation of Working in Research Groups

Group supervisors believed that groups work better as evidenced by seeing group members completing their tasks, however, what transpires within the group and during task performance is not known unless the students report it to the supervisors (Monson, 2019:242). Research supervisory roles are not easy tasks, they are becoming increasingly complex depending on the needs students demand to meet

their expected goals and when supervising a group of students (Hayes & Stefurak, 2011:n.p). However, many students are dissatisfied with the supervisory practices of their supervisors (Hadi & Muhammad, 2017:178). However, other studies mentioned that a large proportion of students fail to complete their studies within the stipulated timeframe or give up their studies completely due to problems related to inadequate supervision (Garg, Goyal & Singh, 2017:35; Heyns *et al.*, 2019:28).

5.2.2.1. Sub-Theme 2.1: Lack of Research Expertise by the Facilitator

Several studies confirmed that even though supervisors put more effort into nurturing the development of novice researchers, they still lack research skills and knowledge in supervising student researches (Javaid & Hussain, 2018:710; Hadi & Muhammad, 2017:178; Niemczyk, 2018:180). Further research stated that supervisors lacked a guide to use in instructing the students in working in a group (Rezaei, 2018:10). It has been shown that many supervisors' attempts to guide student researches are grounded in their mentors' own past experiences (Niemczyk, 2018:180). Moreover, supervisors blamed the challenges such as researchers' high volume of teaching and pressure to publish, time-poor due to heavy teaching loads, pressure to conduct research and publish, and substantial administrative and service responsibilities (Niemczyk, 2018:180).

5.2.2.2. Sub-Theme 2.2: Different and Conflicting Research Views from Facilitators

The idea of having more than one research supervisor has been supported by Grossman & Crowther (2015:1) who found it worthy to have more than one research supervisor for efficiently and effectively smooth running of a research student's supervisory roles. Though it was found desirable to have more than one supervisor in a group, consequently, students should not be caught in between supervisor's

inconsistencies (Lee, 2018:889). Up till now, it is perceived that multiple supervisors resulted in differences in expectations, varying departmental standards of how supervision is undertaken, different understandings of supervisory tasks and an entire novice cohort with no supervisory experience at all which could give rise to any number of inconsistent approaches (Grossman & Crowther, 2015:1).

5.2.2.3. Sub-Theme 2.3: Poor Supervision Role

Despite recognized efforts supervisors put in for students to complete their research studies, it is well-known that not all supervisors have an interest in their work while others are unable to notice a mere sign of student difficulties in progressing to the next step to intervene (Muthanna & Alduais, 2020:2). However, some advisors do not have enough experience in different methodologies. As a result, they allow their students to copy from studies which are conducted by other researchers (Alsied & Ibrahim, 2017:147). Further, some supervisors fail to interact and poorly communicate with students and are only interested in work done than who did it (Heyns *et al.*, 2019:2). Those supervisors do not encourage their students towards creativity, or engaging them to become members of the scholarly community (Muthanna & Alduais, 2020:2). Other challenges investigated include little or no interest in research, absence of supervisor from work, and not coming to work punctually which later hinder the progress in student's research (Alsied & Ibrahim, 2017:148)

5.2.3. Theme:3 Challenges Faced by Students When Conducting Research in a Group

Though what we expect when students are conducting group work was to enjoy all the benefits, the challenges are most frequently reported as stumbling blocks in completing research projects (Havenga & Sengane, 2018:2). The challenges range from insufficient time allocated for research, lack of resources, lack of research

support, etc. (McKinney & Cook, 2018:14). Therefore, if all the challenges are not properly addressed they can challenge students in pursuing their research studies.

5.2.3.1. Sub-Theme 3.1: Insufficient Time Allocated for Research

The issues around lack of time when carrying out research studies has been reflected by several scholars as to the biggest obstacle when conducting research study (Havenga & Sengane, 2018:2; McKinney & Cook, 2018:14; Poort Jansen & Hofman, 2019:9; Alfares, 2017:252). Research with its process needs thorough application with understanding while more time is needed in choosing the topic of the study, search for literature to build the study and understanding the methodology (Alsied & Ibrahim 2017:145). The situation becomes very challenging for the students in the developing countries and rural areas since insufficient time has an effect on constrained availability of the internet and the accessibility of electronic resources (Stone, Dogbey, Klenzak, Van Fossen, Tan & Brannan, 2018:9).

For the students who are conducting group research, more time is wasted when trying to accommodate every member to share ideas, group meetings, consolidating information and sometimes group members take too much breaks or deviate from group goals (Mesquita & Lopes, 2018:9803). However, according to Smith & Thew (2017:352), time will never be enough when conducting research. A measure that was found to be assistive was to set deadlines to help in the progress of research and to prevent the project from being neglected by prioritizing other activities over it.

5.2.3.2. Sub-Theme 3.2: Lack of Resources

Lack of resources pointed out by the study findings conducted by Sibanda, Marongwe & Mbodila (2019:119), stated that in almost all rural higher learning institutions lack research resources such as well-furnished libraries, Information and Communication

Technology (ICT) gadgets, competent library staff, and adequate research equipment and facilities. It has been confirmed that lack of resources has consequences of delaying students to finish their studies on time, discouraging students to further their studies, high rate of drop-out compromise the quality of students' research work in the studied regions (Kehm, Larsen & Sommersel, 2019:151).

On the contrary, there is no evidence to show that lack of resources for research shuttered the need to conduct research, despite the stated shortage, developing countries are using the available resources to investigate more researches (Izugbara *et al.*, 2017:4; Mbombi & Mothiba, 2020:42; Mhlahlo, 2016:164). Though, in countries such as Saudi Arabia, Pakistan, and Iran, cultural and religious contexts intermingle with the development of research for undergraduate women; where female researchers lack mentors as they are not allowed to interact with males other than their husbands (Stone *et al.*, 2018:9).

5.2.3.3. Sub-Theme 3.3: Lack of Support

The study conducted by Denison, Pham & Kim (2017:19) discovered that some higher learning institutions provided limited support to group research, little facilitation, and failed to understand group research composition and how it works. Furthermore, the lack of formal training for group members on how they should work effectively together, lack of formal training for instructors and team leaders on how to effectively structure and manage groups have been recorded (Theobald, *et al.*, 2017:2). It has been reported that research projects need funding (Wang, 2018:696) to purchase equipment or resources as well as recruiting research assistance for the effectiveness of the study (Smith & Thew, 2017:352). Despite the lack of research funds, the universities and colleges have a lot of irregularities with who and which research study are entitled to funding (Goldstein & Kearney, 2017:4). Another concern is how

research funds are utilized after allocation (Meadmore, Fackrell, Recio-Saucedo, Bull, Fraser & Blatch-Jones, 2020:2). In opposing, not all research projects need funds (Smith & Thew, 2017:352).

5.3. Summary

Chapter 5 discussed the study findings. The themes and sub-themes derived from data analysis were supported by other research studies. The students' experiences of conducting group research at Limpopo College of Nursing were more of the challenges they faced. According to the findings, the challenges made students look like they don't want to function as a team. However, if challenges are addressed, the situation could look better than it is. The next chapter presents the summary, limitations, recommendations and conclusions of the study.

CHAPTER 6

SUMMARY, LIMITATIONS, DISSEMINATIONS, RECOMMENDATIONS, CONCLUSIONS AND IMPLICATIONS

6.1 Introduction

The previous chapter presented the discussion of finding and literature control. This is the final chapter in this study. There is no study without limitations and recommendations, therefore, this chapter aims to summarize the study, discuss its limitations and implications as well as the recommendations and conclusions that emanated from it.

6.2 Summary of the Study

6.2.1 The Aim of the Study

The purpose of this study was to explore the experiences of student nurses in conducting group research at Limpopo College of Nursing, South Africa. Indeed, the researcher explored the student experiences in conducting group research. More information is given on how students encounter when conducting a group research project. The researcher achieved the objective of the study by interviewing the participants. The researcher started the whole research process by asking permission to conduct the study, by presenting the research proposal to the Department of Nursing Science in UNIVEN and the School of Higher Degrees Committee (SHDC) for quality assurance purposes. Furthermore, the researcher submitted a research proposal to the University of Venda Higher Degrees Committee (UHDC) and the Research Ethics Committee for quality assurance and ethical approval of the study.

The proposal was also submitted to the Department of Health for approval and permission to access the institutions. Finally, permission to access entry to Limpopo College of Nursing campuses was obtained from the principals of the three campuses.

6.2.2 Objectives of the Study

6.2.2.1 Explore the Experiences of Student Nurses in Conducting Group Research

This objective of the study was achieved through data collection, analysis and interpretation of the findings. The findings of this study revealed that students at Limpopo College of Nursing conduct research in too large groups, not all group members are actively participating in group research projects, there was inadequate knowledge of research on students, lack of research expertise by the facilitator, different and conflicting research views from facilitators, poor supervision role, insufficient time allocated for research, lack of resources, lack of support e.g. funds, data, internet connectivity.

6.2.2.2 Describe the Experiences of Student Nurses in Conducting Group Research

This objective has been achieved since the findings of the study revealed that indeed students were encountering some difficulties when conducting group research. The study further described the findings in detail and are supported by other studies globally. The description of the study findings supported the fact that the problem statement in this study was huge enough and worthwhile to be researched. The bigger picture of what students of Limpopo College of Nursing went through when conducting group research was revealed as the findings were discussed. The students' behaviour with research at Limpopo College of Nursing is linked with the study findings.

6.2.3 Summary of the Research Objectives and the Research Design

In this study, the objectives were to explore the experiences of student nurses in conducting group research and describe the effects of conducting a group research project on student learning. A qualitative approach was used. A qualitative research approach was chosen because the study intentions were to explore experiences and may cover a person's life, lived experiences, behaviours, emotions and feelings which cannot be quantified. Explorative, descriptive and contextual research designs were utilized to provide an in-depth understanding of the aforementioned phenomena. A non-probability purposive sampling method was used in this study to sample the colleges and participants. A pre-test was conducted. A semi-structured interview guide was used. The interview lasted about 30-45 minutes per participant.

6.2.4 Summary of the Theoretical Framework

The study was underpinned by the group development theory (GDT), established by Bruce Wayne Tuckman in 1965. The theory outlines four phases of group development which are: forming, storming, norming and performing (Jones 2019:25). In 1977, Tuckman and Mary Ann Conover Jensen revised the theory and added adjourning as the fifth phase (Bonebright, 2010:114; Guttenberg, 2017:7). The study proved that groups are developed through different stages as discovered by Bruce Wayne Tuckman in 1965, whether knowingly or unknowingly.

6.2.5 Summary of the Themes and Sub-Themes Derived from Data Analyses

- ❖ **Theme 1: Experiences of working in a group - were a theme one developed after data analysis with the following sub-themes emerged:**
 - ❄ **Too large groups**—students were learning research in a large groups of more than seven students.

- ❄ **Poor participation in the group**—students reported poor participation in group research. Some students are reported to be passive while others are not sure of what they are expected of them.
- ❄ **Inadequate knowledge in research**—students entered the College without basic knowledge in research and they lack research knowledge which makes it difficult to comprehend research skills
- ❖ **Theme 2: Facilitation of working in research groups-it was developed after data analysis with its sub-themes and it is a second theme of the study.**
 - ❄ **Lack of research expertise by the facilitators**—participants complained that they are not satisfied by how supervisors are guiding them. Some supervisors were reported not sure of what they are expected of them.
 - ❄ **Different and conflicting research views from facilitator**—participants reported that they were given instructions from different facilitators which contradicted and frustrated them.
 - ❄ **Poor supervisory role**—some supervisors were reported not to avail themselves during a research study.
- ❖ **Theme: 3. Challenges faced by students when conducting research in a group- it is a third and last theme developed after data analysis with its sub-themes emerged.**
 - ❄ **Insufficient time allocated for research**—Participants complained that time allocated was too little to conduct group research.
 - ❄ **Lack of resources**—participants reported lack of internet, data and complemented such a lack by using their own laptops.

- ❄ **Lack of support**—participants reported that they depended upon their own money and they don't get funds from anywhere.

6.3 Limitations of the Study

Limitations are aspects of the study that decrease the generalizability of the findings. This may not be the findings of problems or weaknesses of the study (Gray *et al.*, 2017:57). The study was conducted at Thohoyandou, Giyani and Sovenga nursing campuses of Limpopo College of Nursing only. There are two more campuses, viz., Sekhukhune and Waterberg, which were not included in this study since they train Level 1 students only, who are not introduced to research yet. Level 4 was the only targeted group for this study. There are other students like Level 3 who are also conducting group research projects and they were not included in the study due to a lack of experience in conducting group research.

Therefore, future research should adopt a larger-scale and consider Level 3 students to provide their experiences in conducting group research to generate more information for the study. Some of the students refused to participate in the study, their experiences were not heard and their views would have had effects on the study. It would be useful to investigate the experiences of other stakeholders such as College research facilitators to validate the information. Therefore, the findings can only be generalized in a context similar to what this study prescribed. The lockdown of the country due to Covid-19 delayed data collection and the results of the study.

6.4 Dissemination and Implementation of the Findings

The recommendations made based on the problems identified and the study findings will be communicated to the management of the College. Furthermore, the presentations of the findings will be done for the participants of the study. An electronic

copy will be submitted to the University of Venda Examinations Office for other students to access the findings. The researcher will publish the manuscript in accredited journals to be accessed locally and globally. The study will be presented at accredited research conferences.

6.5 Recommendations

Based on the findings of the study, the following recommendations are made:

6.5.1 Management

- ❄ College management and stakeholders need to strategize on time allocation for the research module by providing students with research periods every week during block and once in every clinical exposure.
- ❄ The management should ensure that research is only supervised by lecturers who have master's or PhD qualifications, considering that they are exposed to individual research and they have experience.
- ❄ The research supervisors should be equipped with research skills through workshops, in-service training, report giving, and seminars.
- ❄ The disciplinary measures should be in place for the student who does not participate in group research and who does not comply with the standards for the research module.

6.5.2 Facilitators

- ❄ Provision for research consultation schedules should be made available for everyone.

- ❄ Students complained of too large groups which are too difficult to manage within themselves. Therefore, the groups should be reduced to be small for about four to seven students.
- ❄ Reducing the number of students in the group will also address the issue of having multiple research facilitators, who give different opinions and views on the same content of the research study which end up confusing and frustrating the students.
- ❄ Therefore, a group should be facilitated by at least two supervisors.
- ❄ The supervisors should give students time to present their progress in the middle of the project's timeframe and every student in a group should have a work s/he has contributed.

6.5.3 Students

- ❄ The students should be provided with a study guide that directs them on what is expected of them when they conduct research. They should further receive training on group learning such as how to set goals, share ideas, divide tasks, use peer and self-assessment, adopt strategies for conflict resolution, communicate face-to-face and via technological means.
- ❄ The orientation on the research project should be done and these should be directed according to specific guidelines. Therefore, every student who is enrolled in the research module should attend the orientation as a prerequisite.
- ❄ Students should be guided on managing time allocated for research.

6.5.4 Nursing Education

- ❄ The research module should have a study guide that prescribes all the necessary information to assist students and facilitators in conducting research. Therefore, the study guide will assist to standardize research in the College and overcome the frustration brought upon by different schools of thought.

6.5.5 Future Research

- ❄ Future research should adopt larger-scale and consider Level 3 students to be participants for research studies in the College.
- ❄ Further studies should also interview the facilitators to provide their experiences in supervising group research.

6.6 Conclusions and Implications of the Study

The aim of this study was to explore the experiences of student nurses in conducting group research and to describe their experiences of conducting the group research project. The researcher achieved the objectives of the study since it has been discovered that indeed there was a lot that the students were experiencing when conducting group research. Students understood the importance of collaborative learning and their experiences of conducting group research were not a bad idea at all. Some students mentioned that group research helped them to learn more from others such as generating new ideas, sharing group work, acquiring skills of dealing with the groups and socialization. Though students benefited from group research, the findings showed that there were issues that made them dislike it since they thought they were not learning adequately. As a result, students ended up not completing their

research projects on time and that negatively affected their final grade marks. Furthermore, the study findings revealed that many students were forced to prefer individual research projects over groups, because of the dynamic challenges they encountered. The study again showed that students had no hope if ever their challenges would be addressed. Those challenges varied from too large learning groups, poor participation by group members, inadequate knowledge in research by students, lack of research expertise by research facilitators, different and conflicting research views from multiple supervisors, poor supervisory role, insufficient time allocated for a research project, lack of resources and support from the institution to students. The researcher believes that if ever these challenges could be addressed well, students will learn effectively in group research without events of reporting one another for group meeting absenteeism, late coming for project work, conflicting on opinions, incomplete work and submitting the research project late for supervision. The researcher further has hope that students will no longer resubmit the final research documents on due dates with countless errors.

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ANNEXURE A

ETHICS CLEARANCE CERTIFICATE

ETHICS APPROVAL CERTIFICATE

RESEARCH AND INNOVATION
OFFICE OF THE DIRECTOR

NAME OF RESEARCHER/INVESTIGATOR:

Ms AS Mavhungo

STUDENT NO:

11530498

PROJECT TITLE: The experiences of student nurses in conducting group research at Limpopo College of Nursing, South Africa.

PROJECT NO: SHS/20/PH/16/0608

SUPERVISORS/ CO-RESEARCHERS/ CO-INVESTIGATORS

NAME	INSTITUTION & DEPARTMENT	ROLE
Dr TR Luhailima	University of Venda	Supervisor
Ms JL Mafumo	University of Venda	Co - Supervisor
Ms AS Mavhungo	University of Venda	Investigator – Student

Type: Masters Research

Risk: Minimal risk to humans, animals or environment

Approval Period: August 2020 – August 2022

The Human and Clinical Trials Research Ethics Committee (HCTREC) hereby approves your project as indicated above.

General Conditions

While this ethics approval is subject to all declarations, undertakings and agreements incorporated and signed in the application form, please note the following.

- The project leader (principal investigator) must report in the prescribed format to the REC:
 - Annually (or as otherwise requested) on the progress of the project, and upon completion of the project
 - Within 48hrs in case of any adverse event (or any matter that interrupts sound ethical principles) during the course of the project.
 - Annually a number of projects may be randomly selected for an external audit.
- The approval applies strictly to the protocol as stipulated in the application form. Would any changes to the protocol be deemed necessary during the course of the project, the project leader must apply for approval of these changes at the REC. Would there be deviation from the project protocol without the necessary approval of such changes, the ethics approval is immediately and automatically forfeited.
- The date of approval indicates the first date that the project may be started. Would the project have to continue after the expiry date; a new application must be made to the REC and new approval received before or on the expiry date.
- In the interest of ethical responsibility, the REC retains the right to:
 - Request access to any information or data at any time during the course or after completion of the project,
 - To ask further questions; Seek additional information; Require further modification or monitor the conduct of your research or the informed consent process.
 - withdraw or postpone approval if:
 - Any unethical principles or practices of the project are revealed or suspected.
 - It becomes apparent that any relevant information was withheld from the REC or that information has been false or misrepresented.
 - The required annual report and reporting of adverse events was not done timely and accurately,
 - New institutional rules, national legislation or international conventions deem it necessary

ISSUED BY:

UNIVERSITY OF VENDA, RESEARCH ETHICS COMMITTEE

Date Considered: July 2020

Name of the HCTREC Chairperson of the Committee: Prof MS Maputle

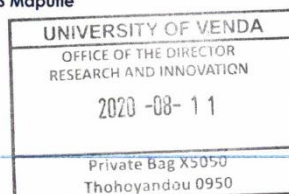
Signature:

MS Maputle

Director Research and Innovation


Signature:

[Signature]



ANNEXURE B

PERMISSION FROM LIMPOPO PROVINCE DEPARTMENT OF HEALTH TO CONDUCT RESEARCH



LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HEALTH

Ref : LP2020-08-049
Enquires: : PF Mahlokwane
Tel : 015-293 6028
Email : Kurhula.Hlomane@dhsd.limpopo.gov.za

Avhatakali Shemary

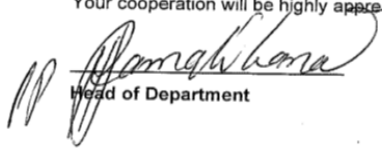
PERMISSION TO CONDUCT RESEARCH IN DEPARTMENTAL FACILITIES

Your Study Topic as indicated below;

The experiences of student nurses in conducting group research at limpopo college of nursing, south Africa

1. Permission to conduct research study as per your research proposal is hereby Granted.
2. Kindly note the following:
 - a. Present this letter of permission to the institution supervisor/s a week before the study is conducted.
 - b. In the course of your study, there should be no action that disrupts the routine services, or incur any cost on the Department.
 - c. After completion of study, it is mandatory that the findings should be submitted to the Department to serve as a resource.
 - d. The researcher should be prepared to assist in the interpretation and implementation of the study recommendation where possible.
 - e. The approval is only valid for a 1-year period.
 - f. If the proposal has been amended, a new approval should be sought from the Department of Health
 - g. Kindly note that, the Department can withdraw the approval at any time.

Your cooperation will be highly appreciated



Head of Department

14/09/2020

Date

Private Bag X9302 Polokwane
Fidel Castro Ruz House, 18 College Street. Polokwane 0700. Tel: 015 293 6000/12. Fax: 015 293 6211.
Website: <http://www.limpopo.gov.za>

The heartland of Southern Africa – Development is about people!

ANNEXURE C

REQUEST FOR PERMISSION TO CONDUCT RESEARCH STUDY FROM LIMPOPO COLLEGE OF NURSING (THOHOYANDOU CAMPUS)

PO BOX 2956
THOHOYANDOU
0950

LIMPOPO COLLEGE OF NURSING
THOHOYANDOU NURSING CAMPUS
Private Bag x919
Shayandima
0945

RE: REQUEST FOR PERMISSION TO CONDUCT RESEARCH STUDY

TO: THE ACTING PRINCIPAL

I, Mavhungo A.S, registered for a master's degree at the University of Venda. I am requesting permission to conduct my research study at your campus. I am intending to explore the experiences of student nurses in conducting group research at Limpopo College of Nursing, South Africa at your campus.

Ethical clearance will be obtained from the University of Venda's Research Ethics Committee.


I have been permitted by the University of Venda to carry out this study as part of the requirements for the degree.

Your approval to conduct this research study will be highly appreciated.

Mavhungo A.S.

ANNEXURE D

PERMISSION FROM LIMPOPO COLLEGE OF NURSING TO CONDUCT RESEARCH (THOHOYANDOU CAMPUS)




LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA

DEPARTMENT OF HEALTH
LIMPOPO COLLEGE OF NURSING: THOHOYANDOU CAMPUS

To: Ms Mavhungo AS
FROM: Acting Vice Principal
ENQ: Mr. Mbuwe MM
DATE: 09 October 2020

RE: PERMISSION TO CONDUCTION RESEARCH DATA AT THOHOYANDOU NURSING CAMPUS

1. This serves to confirm that your request to collect data from our students has been granted.
2. Students will be available on any weekend that is convenient for you.
3. Hoping that the above arrangement will suffice

Thank you
 09-10-2020
Acting Vice Principal

Private Bag X919, SHAYANDIMA, 0945, Vhembe District
Next to Tshilidzini Hospital along Punda Maria Road
Tel: (015) 964 1516/8 . Fax: (015) 964 1517
Website: <http://www.limpopo.gov.za>

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ANNEXURE E

REQUEST FOR PERMISSION TO CONDUCT RESEARCH STUDY FROM LIMPOPO COLLEGE OF NURSING (SOVENGA CAMPUS)

PO BOX 2956
THOHOYANDOU
0950

LIMPOPO COLLEGE OF NURSING
SOVENGA NURSING CAMPUS
Private Bag x 1122
Sovenga
0727

RE: REQUEST FOR PERMISSION TO CONDUCT RESEARCH STUDY
TO: THE ACTING PRINCIPAL

I, Mavhungo A.S, registered for Master of Nursing degree at the University of Venda. I am requesting for permission to conduct my research study at your campus. I am intending to explore the experiences of student nurses in conducting group research at Limpopo College of Nursing, South Africa at your campus.

Ethical clearance will be obtained from the University of Venda's Research Ethics Committee.


I have been permitted by the University of Venda to carry out this study as part of the requirements for the degree.

Your approval to conduct this research study will be highly appreciated.


Mavhungo A.S.

ANNEXURE F

PERMISSION FROM LIMPOPO COLLEGE OF NURSING (SOVENGA CAMPUS) TO CONDUCT RESEARCH STUDY



LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA



DEPARTMENT OF HEALTH
LIMPOPO COLLEGE OF NURSING: SOVENGA CAMPUS

Enq: Phaahla P.M

From: Office of the Vice Principal

Date: 26 /10 /2020

To: Mavhungu A.S

P.O BOX 2956

Thohoyandou

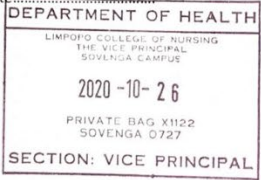
0950

PERMISSION TO CONDUCT RESEARCH AT LIMPOPO COLLEGE OF NURSING (SOVENGA CAMPUS)

- This is to confirm that Mavhungu A.S has been granted permission to conduct research on "the experiences of student nurses in conducting group research at Limpopo College of Nursing, South Africa".
- The research will be conducted on level IV student nurses on the 30TH October 2020.
- There should be no actions that disrupts the activities of the college in the course of the study.
- The researcher should be prepared to assist in the interpretation of the study recommendations where possible.

Thanking you in advance

Vice Principal Mochakini Nw Signature Phaahla P.M Date 26-10-2020



ANNEXURE G

REQUEST FOR PERMISSION TO CONDUCT RESEARCH STUDY FROM LIMPOPO COLLEGE OF NURSING (GIYANI CAMPUS)

PO BOX 2956
THOHOYANDOU
0950

LIMPOPO COLLEGE OF NURSING
GIYANI NURSING CAMPUS
Private Bag x9658
Giyani
0826

RE: REQUEST FOR PERMISSION TO CONDUCT RESEARCH STUDY

TO: THE PRINCIPAL

I Mavhungo A.S registered for a Master of Nursing degree at the University of Venda. I am requesting permission to conduct my research study at your campus. I am intending to explore the experiences of student nurses in conducting group research at Limpopo College of Nursing, South Africa at your campus.

Ethical clearance will be obtained from the University of Venda's Research Ethics Committee.


I have been permitted by the University of Venda to carry out this study as part of the requirements for the degree.

Your approval to conduct this research study will be highly appreciated.


Mavhungo A.S.

ANNEXURE H

PERMISSION FROM LIMPOPO COLLEGE OF NURSING (GIYANI CAMPUS) TO CONDUCT RESEARCH STUDY



LIMPOPO
PROVINCIAL GOVERNMENT
REPUBLIC OF SOUTH AFRICA



DEPARTMENT OF HEALTH
LIMPOPO COLLEGE OF NURSING: GIYANI CAMPUS

14-10-2020

MS. MAVHUNGO A.S
P.O BOX 2956
THOHOYANDOU
0950

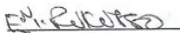
PERMISSION TO CONDUCT A RESEARCH STUDY: YOURSELF

Permission is hereby granted for collection of research data from students.

Please make an appointment with the campus and ensure not to disrupt the learning programme of students.

Yours Truly

Vice Principal


E.T Rikhotso

Private Bag X9658 GIYANI, 0826
Tel: (015) 812 0330/1/2 or (015) 812 0123/0213 Fax: (015) 812 0123
Website: <http://www.limpopo.gov.za>

The heartland of Southern Africa – Development is about people!

ANNEXURE I

LETTER OF INFORMATION

RESEARCH ETHICS COMMITTEE

UNIVEN Informed Consent Appendix B

Title of the Research Study: The experiences of student nurses in conducting group research at Limpopo College of Nursing, South Africa.

Principal Investigator/s/ researcher: Mavhungo Avhatakali shemary

Co-Investigator/s/supervisor/s: Dr. Luhailima T.R

Brief Introduction and Purpose of the Study:

Conducting group research simply tells that research is being carried out by a group of people. The constitute for the group may come from the same school, subject or even from different subjects within a faculty. While many instructors from disciplines across the institutions prefer students to work in groups to enhance student understanding of the learning content; Limpopo also requires their students to conduct group research projects. Therefore, conducting group research involves research processes and dealing with group. The researcher is interested in exploring the experiences of student nurses in conducting group research at Limpopo College of Nursing, South Africa.

Purpose of the study is to:

The purpose of this study is to explore the experiences of student nurses in conducting group research at Limpopo College of Nursing, South Africa.

Objectives of the study is to:

To explore the experiences of student nurses in conducting group research

To describe the experiences of student nurses in conducting group research

Outline of the Procedures:

The purpose of this visit is to collect data as I requested from you. The topic of this study is “*The experiences of student nurses in conducting group research at Limpopo College of Nursing, South Africa*”. The study is requirement for Master’s degree at University of Venda. The Interview will be one-on-one

and it will last about 30-45 minutes per participant. Participants are expected to read and sign letter of information and concern form (see annexures G and H). I will also explain what is meant on letter of information. By signing you are indicating that you participated in this study willingly, no one will force you to participate. There is guide that I will be referring to when asking the questions and do not get surprised. I will be writing down your responses so that I have the information in a written form. Im also requesting to use voice recorder to capture what you will be telling me. I will only use it if you give me permission to do so. You need not to worry about it because your identity or names is not needed here. The information you give will be kept for about five years, in case its need to be verified. If I do not understand what you have said, I will request you to repeat yourself to verified the information, so do not be offended. Do you allow me to proceed?

Risks or Discomforts to the Participant:

There are no risks that are anticipated during data *collection*.

Benefits:

The study findings will be communicated to all campuses of Limpopo College of Nursing. The presentation of the study findings to the management of the campuses of Limpopo College of Nursing will be done. The target group of the study will be informed about the study findings. The study copies will be submitted to the libraries to be accessed by the students. The University of Venda will also be provided with the study copies in the form of bound copies and discs. The study will be presented at national and international conferences. The study will also be available on the internet for global accessibility.

Reason/s why the Participant May Be Withdrawn from the Study:

The participants will be ensured that if they feel like they do not want to participate, they are free to withdraw and there is no any action that would be taken against them.

Remuneration: Participants will not receive any monetary or other types of remuneration during or after the study.

Costs of the Study: participants will not be liable to cover any cost regarding the study.

Confidentiality:

The names of the participants and identity document will not be required to ensure confidentiality. The researcher will also ensure to the participants that the information shared will not be used against them and will be kept safe. Furthermore, participants will be interview one by one and privacy will be maintained.

Research-related Injury: No injuries anticipated during data collection and on the entire study.

Persons to Contact in the Event of Any Problems or Queries:

Dr T.R. Luhlima (Supervisor) Please contact the researcher (Tel: 076 289 3677), my supervisor (Tel: 072 482 3404) or the University Research Ethics Committee Secretariat on 015 962 9058. Complaints can be reported to the Director: Research and Innovation, Prof G.E. Ekosse on 015 962 8313 or Georgeslvo.Ekosse@univen.ac.za

General:

Potential participants must be assured that participation is voluntary and the approximate number of participants to be included should be disclosed. A copy of the information letter should be issued to participants. The information letter and consent form must be translated and provided in the primary spoken language of the research population

ANNEXURE J

CONSENT FORM

Statement of Agreement to Participate in the Research Study:

I hereby confirm that I have been informed by the researcher, (*name of researcher*), about the nature, conduct, benefits and risks of this study - Research Ethics Clearance Number:

- I have also received, read and understood the above written information (*Participant Letter of Information*) regarding the study.
- I am aware that the results of the study, including personal details regarding my sex, age, date of birth, initials and diagnosis will be anonymously processed into a study report.
- In view of the requirements of research, I agree that the data collected during this study can be processed in a computerized system by the researcher.
- I may, at any stage, without prejudice, withdraw my consent and participation in the study.
- I have had sufficient opportunity to ask questions and (of my own free will) declare myself prepared to participate in the study.
- I understand that significant new findings developed during the course of this research which may relate to my participation will be made available to me.

Full Name of Participant	Date	Time	Signature
I,

(*Mavhungo Avhatakali shemary*) herewith confirm that the above participant has been fully Informed about the nature, conduct and risks of the above study.

Full Name of Researcher

.....	Date	Signature.....
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Full Name of Witness (If applicable)

.....	Date	Signature.....
-------	------	-------	----------------

Full Name of Legal Guardian (If applicable)

.....	Date	Signature.....
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Please note the following:

Research details must be provided in a clear, simple and culturally appropriate manner and prospective participants should be helped to arrive at an informed decision by use of appropriate language (grade

10 level- use Flesch Reading Ease Scores on Microsoft Word), selecting of a non-threatening environment for interaction and the availability of peer counseling (Department of Health, 2004)

If the potential participant is unable to read/illiterate, then a right thumb print is required and an impartial witness, who is literate and knows the participant e.g. parent, sibling, friend, pastor, etc. should verify in writing, duly signed that informed verbal consent was obtained (Department of Health, 2004).

If anyone makes a mistake completing this document e.g. a wrong date or spelling mistake, a new document has to be completed. The incomplete original document has to be kept in the participant's file and not thrown away, and copies thereof must be issued to the participant.

References:

Department of Health: 2004. *Ethics in Health Research: Principles, Structures and Processes*

<http://www.doh.gov.za/docs/factsheets/guidelines/ethnics/>

Department of Health. 2006. *South African Good Clinical Practice Guidelines*. 2nd Ed. Available at:

http://www.nhrec.org.za/?page_id=14

ANNEXURE K

INTERVIEW GUIDE

Introduction

Greetings

My name is **Mavhungo Avhatakali Shemary** and I'm currently registered as a student at the University of Venda and I'm conducting this study as part of the requirements for my learning exposure.

The main aim is to explore the student nurses' experiences in conducting group research at Limpopo College of Nursing. I invite your participation as the key informant for the study.

The interview will last for about 30 minutes. If you agree to take part, I will ask the following related questions.

1. Can you share with me your experiences of conducting group research?
2. What have you learned so far on your group research project concerning research process?
3. What more can you share with me concerning the conducting of a group research project?

ANNEXURE L

PARTICIPANT TRANSCRIPT

8. TRANSCRIPT

PARTICIPANT 12

Interview- key

R- Researcher

P- Participant

R: Afternoon

P: Afternoon

R: How are you?

P: I'm good and you?

R: I'm fine. My name is Shemary Avhatakali Mavhungo. I am a student from university of Venda. Im here today to collect a data concerning my field of study which is the "The experiences of student nurses in conducting group research. "I have granted a permission to conduct this study by the department of health and access to enter this premises have been authorized by your principal.

P: Ok

R: As you become a participant for this study, there will be no monetary or other types of remuneration that will be given, whether during or even after the study. You are not liable to pay any cost that cover the study or to pay anything for this study. Your names are not important here and we do not need your identity for confidentiality sake. Here in page three of four is the concern form and you only sign it when you are willing to participate in this study. Are you willing to participate?

P: Yes, I am

R: Ok, thank you. You will write my name here (researcher show the participant a place to sign). My name is written down there if you don't know how to write Mavhungo. You will also have to write your Names here and signature. The reason of writing names and signature is to show that you participate in this study willingly

P: Ok

R: Is the anything you would like to ask before we can start?

P: No

R: Ok, the information you are going to give will remain between me and you and it will never be used against you. I understand that you agree to participate, however it might happen that in the middle of this session you feel like you are no longer interested or something came up and you need to go. Please just alert me that you don't want to continue so that we terminate the conversation or this session. Nothing will be taken against you, so feel free.

P: Ok

R: Ok

P: Is this your name? (Participant asked researcher to verify her name so she can copy when completing the annexure H and G)

R: Yes. You don't have water supply here? (researcher asked because she found the participant with the trolley carrying water and other currying buckets of water outside the building)

P: No, this block does not have and even the toilets are not working.

R: Ok

P: Mmm, today is the 15th?

R: No the 17th

P: Time?

R: Mmm, I think is 15h38, Ok thank you very much (researcher thanking the participant for bringing the concern form back after signing it). You said you don't have any question? can we start?

P: No, I do have a questions (laughing). We can start.

R: Researcher laughing as well. I can see that you are really awaiting for this session to start and you are paying attention for it (laughing)

P: Participant laughing as well

R: Ok, thank you. Mmm which level are you currently studying?

P: Level four

R: Are you currently busy with your group research project?

P: Yes, we are

R: Ok. You are a right candidate for this study. Can you please share with me your experiences of conducting group research?

P: Conducting group research is difficult more especially the way they have taught us on how we should do research. It was not enough information, the way they presented it...eish I think the lecturer's skill of informing us research was like inadequate. It took us time to come up with research proposal. We also struggle to come up with the topic as well as literature review. It was problematic to us. we went to library and never get a thing tjooo. We went on line and then we got something. The referencing part was challenging. I also still feels like with time individual research is still going to be a difficult experience. I cannot conduct my own research individual. Jaa it is tough.

R: Why because you are learning it right now?

P: The thing is that the people who need to help us especially the facilitators from the component with us, they give different opinion on one content and it is difficult to implement. One will give us this and the other one gives us that. We end up being confused. We don't know what to do or take which corrections.

R: Sorry, if I may ask, who are the people you are refereeing to?

P: The lecturers as research supervisors

R: How many supervisors I you having?

P: They are four

R: All four of them are supervising one group?

P: Yes, each component is supervising one group

R: I heard you saying one supervisor will tell you this and the other that. How do they supervise you being four?

P: Initially supervisor will give you input for research to go and implement, When they go and discuss as lecturers, the other one will come with this and the other one with that. When you implement they come and crush it (participant laughing)

R: Laughing as well.

P: Anyway the proposal end up approved by the panel

R: How does that different opinions affect you as far as learning of research is concern?

P: It becomes difficult because people do not sit down and come up with one input. We don't know which information to take. We end up demoralised and it discourages us to peruse with the studies as research is needed. They make it difficult for us more especial in our component. Every time when we meet they are not there. When we submit document its only one person who come and check it. We implement all that has been suggested, when others come back they crush what has been affected on the document. It waste time because we take one step backward always.

R: How often do you do research?

P: Ok, during block time, every week there is research period which is two and half hours. Mostly the supervisors do not come to group. We go to them if we want assistance but there will be only one lecturer.

R: How does it affect when facilitators do not avail themselves to your group to help?

P: The previous time when we went to the supervisor, she crushed something out and she said it was not suppose to be there. Than we told her that it is already been approved. When we go to another supervisor she promised that she will talk to the one who want to change approved document. During research we go there and she is not in, than we end up leaving the group meeting. How can we remove things that is already approved? Our research has stopped there because we cannot continue without correcting mistakes. When we need to utilise free time. It ends up consumed time for other modules.

R: I heard you saying research period is allocated each week in the block. Why do you go use your own time while you have periods allocated for it?

P: It is because during the period allocated, we do not have supervisor to help us with corrections. So we do not want to do corrections which we are not sure of. If we force to do it and submit, we are still going to do it again because they will crush everything. We just end up saying let leave and study something because there is no way forward.

R: Ok, I understand. What makes them not avail themselves to supervise the group?

P: I think it could be personal issues that they don't want to put it aside. Previous group of researchers said something that we are experiencing right now. I believe it because we have never find them in a same place. Every supervisor is on his/her space

R: So how is the relationship among you as a group?

P: With the students, the thing is that we don't have sort of tension. The problem is that we have student who do not participate actively in the group. some they are just like passengers, they just come and sit in the group. We allocate work among us with due date but some students came

without doing the work and you end up doing it yourself. The main problem is active participation. Few students discuss research project and the others are just there.

R: Tell me, how many are you in the group?

P: We are twelve. The other one left in level three because they failed the class. We were fourteen

R: Previously you were fourteen

P: Yes

R: Do you have group rules or norms that govern the group?

P: We do have. For late coming we fine them and the money they pay we used it to print and photocopying things like that.

P: with issue of active participation, the lecturers told us we should report and they will do research on their own. We feel that it will be difficult for one person to start research on his/her own. We end up saying ok, let's do work for them.

R: What could be the problem of failing to participate actively?

P: I don't know, some people are extrovert and others introvert. Some I know they are like quite people. Someone has a mental problem. She isolates herself most of the time, at least we know her condition. So, if we give her work, she do it. Some they just don't want to work so we end up keeping quiet and put your thoughts to be implemented.

R: How much fines do people pay?

P: Late comers pay R50.00 and if you don't come at all is R100.00 unless you are sick or family issues so you don't pay.

R: I understand. So how do you make sure that the person who was absent in the group meeting catches up with what has done on his/her absentia?

P: Ok, we had one who attended funeral and we allocated a work in her absentia. When she comes back, she went to a person whom we appoint to take her on board of what was done and give work assign to her. As long as work is done, some they don't even ask what was done on their absentia. People don't care as long as the work is done. No, they don't care. We continue with them like they were there.

R: Do you think these kind of people are learning enough as far as acquiring of research skill is concern?

P: I don't think so. When you are not actively participating in the group, not asking questions and acquiring information about it, you won't be able to be competent. You will not be able to conduct study individually without the help of others. You will not be able to do it individually without the help of others because you were relying on other people to do so.

R: Do you sometimes encounter conflict in the group?

P: Yes, we do. Especially with late coming. You will find a person calling after ten minutes of grace period to say, guys where are you? No, that person is late. The other conflict is when we allocate a person to do group work and come without doing the work. When we have to type. People have to bring own computers but no they don't bring it. I used to bring mine and now I stopped because people are not willing to come up with theirs or to borrow from their close friends. So that we can type very quickly. These are the kind of problems we are facing.

R: I heard that you are using your own lap-top but others are not having or bringing theirs. Where do you get those lap-tops? Does the college provide you with it? Or research funds?

P: We don't have funds for research. We use our own and we use our own stipend to buy it. We are not even funded. They only provide us with the transport only when we need to collect data. The other cost we do it by ourselves even the printing of the document.

R: So, since you do almost everything with your own money how does that affect your learning of group research?

P: I don't think it will affect that much on our learning. They always reminded that the stipend is for our study not personal use (laughing). You know at some point we do not do things like printing out frequently. Most of the time we use email to send document to the lecturer except with one lecturer who wanted hard copy. The only challenge we have is the lack of computers for typing.

R: Does the research need you to have a typing skill?

P: Yes, we can say that because when we use our gadgets we get used to it. The only thing is that we have to use proper English when we type. So, the problem is that some people are fast typist fast while others are not.

R: Let me take you back. I heard you saying research orientation provided you with little or scanty information. What do you mean by that?

P: When a person has an experience of certain thing, you can see when a person present information. You can see that this person knows whatever he/she is presenting. When you read from text book it is still bit difficult to understand and impart knowledge to others. Even when we started research introduction in level two, it was difficult. I remember the test we wrote about research, we failed most of us in the class. It was different to understand research even though we did introduction to research (laughing). According to me introduction was not enough and it provided us with little information on how to reference and doing literature review. We were not covered enough to say we got what is needed

R: If you can be given a chance to suggest a research orientation. How will you like it to be?

P: Preferable, we would want somebody who did research. Who did masters or PhD in our nursing component, who have experience in the world of research rather than somebody who done group research long time ago.

R: If I heard you well. Are you trying to tell me that there are facilitators who haven't done research?

P: I don't know if they done some specialties which offers them to do research better than the diploma they did here in the collage? I think many of them they did not do their individual research

R: How much is the stipend?

P: It is about eight or nine thousand

R: What have you learned so far on group research?

P: Drafting research proposal, though if they want me to do individual, it will be still difficult to do it alone

R: Does it mean you are unable to remember all the steps that you went through when writing research proposal?

P: No I do not

R: But you are a group leader?

P: Yes, I am a group leader(smiling)

R: Why are you not remembering? like you have been exposed to research and you are doing it at the moment?

P: Ok, it is not like I did not grasp anything on orientation part. Research has steps like where you do this and that up to the end. Mmm..my main concern is the literature review. I do not know if I can do masters with the knowledge I acquire (laughing)

R: Laughing, you can if you want, I think it will depends on how you are utilising the time, wether effectively or for the sake of finishing the course?

P: Mmm (participant nodding the head as to agree with what the researcher said)

R: Do you have necessary resources that help you to learn in this group research?

P: We have text books that we get information from. But the library is not adequate

R: What do you mean by not adequate?

P: The last time when we went there to check the books, we did not find a thing and we went out to public library outside the College so the resources are very limited.

R: If you can be given a chance to learn research as a group or as an individual, which one will you prefer?

P: I prefer individual.

R: Why?

P: Because in a group it is only one or two people who put more effort while others are just there. They don't put more effort. I preferred doing it individual, even group work for me is difficult. Individual means it's you, your own effort for your own result. It means you will work hard and consult necessary people and get assistance from the relevant people because you will be doing it for yourself rather than doing it for the group. it demotivates because it's you alone for the whole group.

R: Any more experiences you want to share with me regarding conducting of group research?

P: Nothing (laughing)

R: have you shared all the experiences?

P: Yes

R: Ok, let me take this opportunity to thank you for your time, your effort of leaving everything and come to be a participant. Thank you

P: Ok.

ANNEXURE M

LANGUAGE EDITING AND TYPESETTING CERTIFICATE



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17 October 2021

To Whom It May Concern

This serves to confirm that I have edited the language, spelling, grammar and style of the **Masters in Nursing Science** thesis by **Avhatakali Shemary Mavhungo**, titled: **“The Experiences of Student Nurses in Conducting Group Research at Limpopo College of Nursing, South Africa”** The manuscript was also professionally typeset by me.

Sincerely Yours



Cert. Freelance Journalism, Dip. Creative Writing, MSc (Medicine), PhD (Medicine)